Everyday life in a changing climate

Exploring young Copenhageners' small stories about experiencing and responding to climate change in everyday life

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Nina Moesby Bennetsen

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A PhD dissertation from Doctoral School of People and Technology

RUC

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Preface by the Doctoral School

A PhD dissertation is like a proof showing that the author has "carried out an independent research work under supervision" as stated in the Ministerial Order on the PhD Programme at the Universities. The PhD dissertation is regarded as frontier research, being critically reviewed and approved by scientific peers, to secure the state of knowledge, clarify contradictions and evaluate the contributions to emerging research areas.

The Doctoral School for People and Technology frames research that seek to address sustainability often by applying experimental approaches providing individuals active and learning involvement. The research comprises approaches of human, societal, health and information technology, often applying planning, interventions and design-oriented subject areas. The Doctoral School has 5 Ph.D programmes with each of their focus points.

The PhD programme in Society, Space and Technology is based on a multidisciplinary approach to research and spans technology, natural science, social sciences and the arts. The programme connects the various disciplinary aspects of the research, for example in relation to technology, resources, and culture as the basis for the social production and reproduction of various research objects. This PhD is embedded within the MOSPUS research group that develops theoretically informed and critical research on the themes of space, place, mobility, and urban studies. The group brings together researchers from a variety of disciplines that include geography, sociology, anthropology, planning and architecture. MOSPUS' work is guided by a strong commitment to social justice and to making more sustainable and democratic futures.

This PhD thesis explores everyday life perspectives of how young Copenhageners talk about climate change, and how an exploration of everyday talk can contribute to understandings of climate challenges. To do so a concept of *small stories* is developed through the thesis, emphasising challenges and dilemmas in everyday life and the climate challenges these reflect. The analysis builds on qualitative interviews combined with photo elicitation, walk-alongs and online focus groups with young Copenhageners showing how climate change is talked about as experiences of and responses to climate change. The analysis of small stories is informed by exploring the way climate change is staged in the context of Copenhagen. Inspired by the concepts ecological and sociological imagination, it is explored how climate change is an issue experienced in various ways; how it is talked about as both a near and distant phenomenon in everyday life; and how it evokes everyday life responses. The thesis contributes with a detailed analysis of how small stories

about climate change can enhance understandings of climate challenges in research and in practice. The thesis both makes methodoogical contributions as well as essential research findings. The concept of small stories is situated within the field of mobilities research, giving attention to the ambivalence of everyday life experiences. In this way the thesis provides new insight into understanding young people's reflections and (in)action to climate change.

This research reveals knowledge that nuances the way young Copenhageners think about acting upon climate change. This approach is an essential part of future urban planning if visionary goals in the field of sustainable transition and urban living are to be achieved.

Enjoy the reading.

Katrine Hartmann-Petersen, Associate professor, PhD Supervisor

Abstract

Drastic changes in Earth's systems are considered the biggest contemporary challenge for human beings, cities and societies. Cities worldwide take climate action, and Copenhagen is no exception. For more than a decade, the City of Copenhagen has dealt strategically with climate change and is now internationally renowned for combining strategies for sustainability and liveability. This thesis explores the everyday life perspective of how Copenhageners talk about climate change, based on the guiding research question:
How do young Copenhageners talk about climate change, and how can an analytical exploration of this everyday talk contribute to understandings of climate challenges?

I have developed the empirically founded concept **small stories** to explore the everyday talk about climate change. This approach emphasises the importance of the often-overlooked kinds of everyday talk about an issue. Small stories are fleeting, but detailed accounts, often concerning present, past, future and possible events related to an issue. Small stories contribute to understandings of climate challenges as they reflect challenges and dilemmas in everyday life engagements in climate change.

With an abductive and exploratory approach, I explore how a group of young Copenhageners talk about climate change and find that climate change is talked about as experiences and as evoking responses. I do this through 20 qualitative interviews combined with photo elicitation and walk-alongs and two online focus groups with Copenhageners between the ages of 20 and 39. The analysis of the small stories is framed in the context of Copenhagen, through an analysis of municipal documents and a supplementary expert interview, together informing an analysis of how climate change is staged in Copenhagen.

The sociological concepts ecological imagination and sociological imagination has inspired the research, and through an analytical exploration of young Copenhageners' small stories, I engage in how climate change is talked about as both a near and distant phenomenon in everyday life in Copenhagen and an issue that is experienced in various ways. Climate change is also talked about as an issue that evokes everyday life responses. I argue that the individual response-abilities in everyday life are challenged by constraints and dilemmas as well as an overall incongruence between everyday life and the global issue.

The thesis contributes with detailed analyses of how small stories about climate change can enhance understandings of climate challenges in research and in practice.

Danish abstract

Omfattende forandringer i jordens systemer betragtes i dag som den største udfordring for mennesker, byer og samfund. Over hele verden tager byer klimahandling, og København er ingen undtagelse. I mere end et årti har Københavns Kommune arbejdet strategisk med klimaforandringer, og København er i dag internationalt anerkendt for at kombinere strategier for bæredygtighed og såkaldt liveability. Med et hverdagslivsperspektiv undersøger jeg i denne afhandling hvordan københavnere taler om klimaforandringer, baseret på forskningsspørgsmålet: Hvordan taler unge københavnere om klimaforandringer, og hvordan kan en analytisk udforskning af hverdagslige måder at tale om emnet bidrage til forståelser af klimaudfordringer?

Jeg har udviklet det empirisk funderede begreb **små fortællinger** til at udforske hverdagslige måder at tale om klimaforandringer på. Tilgangen understreger vigtigheden af de ofte oversete måder, der tales om et samfundsproblem i hverdagen. Små fortællinger er flygtige, men detaljerede beskrivelser af et problem, og omhandler ofte nuværende, tidligere, fremtidige og mulige begivenheder relateret til problemet. Små fortællinger bidrager til forståelser af klimaudfordringerne, fordi de afspejler udfordringer og dilemmaer i hverdagsligt engagement i klimaforandringer.

Med en abduktiv og eksplorativ tilgang undersøger jeg, hvordan en gruppe unge københavnere taler om klimaforandringer og finder, at klimaforandringer tales om som oplevet og som et problem, der ansporer til respons. Det gør jeg gennem 20 kvalitative interviews kombineret med photo elicitation og walk-alongs og to online fokusgrupper med unge københavnere mellem 20 og 39 år. Analysen af små fortællinger rammesætter jeg i kontekst af København, gennem analyser af kommunale dokumenter og et ekspertinterview. Begge bidrager til, hvordan klimaforandringer bliver iscenesat i København.

De sociologiske begreber økologisk fantasi og sociologisk fantasi har inspireret afhandlingen, og gennem en analytisk udforskning af de unge københavneres små fortællinger, undersøger jeg, hvordan klimaforandringer bliver talt om som et både nært og fjernt fænomen, der opleves forskelligt og som et fænomen, der ansporer til hverdagslig respons. Jeg argumenterer for, at individuelle handlemuligheder er udfordrede af begrænsninger og dilemmaer og af en inkongruens mellem hverdagsliv og det globale problem.

Afhandlingen bidrager med detaljerede analyser af, hvordan små fortællinger om klimaforandringer kan udbygge forsknings- og praksisforståelser af klimaudfordringerne.

Thank you

… to all the people who have helped me learn, do the work and write this thesis. Writing a thesis is, like sewing a patchwork quilt, a long and slow process, and although only my name has made it on the cover, this thesis would not have been possible, if it weren't for the many people who have helped. Especially finishing a PhD during a year of a pandemic and national lockdowns has proven a great challenge that I could not have overcome without the kind help of others. I would like to give my heartfelt appreciation to:

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Contents

Chapter 1

Small stories about everyday life in a changing climate

Earth's climate is changing. This has been the message from climate scientists for decades. Expert reports document current comprehensive ecological, social and economic transformations and forecast further drastic transformations in the near future (e.g, IPCC 2014d). Nearly every day, local and global media bring news about glaciers melting, temperatures rising, rainfalls damaging homes and infrastructure, storms reaching coasts stronger than expected, forests burning, species going extinct, sea levels rising or other events that are connected to changes in Earth's systems. These interrelated comprehensive changes are expected to profoundly change the conditions of life on Earth (Beck 2016; Urry 2011). Yet, these changes have been considered spatially and temporally distant in everyday life for many people living in countries in the Global North (Beck 2009; Bulkeley 2013; Giddens 2011; Gundelach, Hauge, and Nørregård-Nielsen 2012; Neimanis and Walker 2014; Nilsen 1999; Norgaard 2011; Ojala 2016; Urry 2011).

Extreme weather events are, however, no longer solely phenomena of the future or distant regions of the world. Cloudbursts and long periods without rain have occurred in Denmark in recent years (Damberg 2018; Danish Meteorological Institute 2012). Experts have linked the increased precipitation, temperatures and hours of sun in Denmark to global changes in the climate (e.g., Danish Meteorological Institute 2020a, 2020b).
At the same time, Danish media flood with guides and recommendations for how individuals can reduce their carbon dioxide emissions by making climate-friendly choices in their daily lives. A recent example of this is the following quote from a guide published in the Danish newspaper Politiken: "You are what you eat, they say. The same is true for our planet's condition. What you eat will, in the end, influence the earth's climate in one direction or the other" (Mølbak 2021, my translation). In various guides on how to make climate-friendly choices, everyday life choices of individuals are connected to the development of the global issue. Climate change has become present in the Danish public

debate. However, for most people, everyday life appear to continue without drastic changes. At least this was the case until the beginning of 2020, when the COVID-19 virus spread across the world, causing national lockdowns which dramatically changed everyday life for most people and reduced both every day and holiday movement of people all over the world[1] (Freudendal-Pedersen and Kesselring 2020; Sheller 2020).

When I initiated this research in 2018, I found it an interesting paradox that we humans know more than ever before about the human-induced pressure on Earth's systems, and yet we seem locked in our resource-intensive everyday lives. A curiosity to explore this seeming paradox led me to initiate this research. My assumption was that there is more to the story of this paradox than that people do not know enough or do not care about the issue. In this thesis, I explore the ways climate change is narrated in everyday life, and why such stories matter for an urban planning interest in climate change-related visions.

This thesis is an exploration of what I term **small stories** about climate change in the everyday life context of Copenhagen, in other words how a group of Copenhageners aged 20-39 talk about the issue in an everyday life context. **Small stories** are different from, but related to **discourses**, **big stories** or **grand narratives** about cities, societies or cultures, **biographical life stories** – the comprehensive stories about individuals' lives and experiences and **structural stories** – common stories told to argue for or against choices and actions (Freudendal-Pedersen 2016b; Jørgensen and Phillips 2002; Thomsen, Bo, and Christensen 2016). Later in this chapter, I define and discuss **small stories**.

By exploring so-called small stories, I pay attention to the local, particular and easily overlooked narrative accounts about the global issue in everyday life in Copenhagen (Bennetsen 2019; Georgakopoulou 2006; Phoenix 2013; Thomsen, Bo, and Christensen 2016). My analytical exploration of the small stories about climate change focuses attention on everyday life narrative accounts about how climate change is made sense of and the paradoxes of how the phenomenon is narrated. In this thesis, I examine which understandings might arise from exploring these small stories. I place the project within sociological traditions and make the urban context the framing of the thesis' everyday life focus, as I consider these inextricably entangled and one another's prerequisites.

[1] As I conclude this work at the end of another national lockdown in 2021, I find it almost unheard of to not place the current pandemic conditions at the core of my research. However, I initiated the research in 2018, and I have done most of the empirical work before 2020. Therefore, the pandemic has only a small presence in this thesis. I include quotes about COVID-19 from interviews and focus groups when they are related to climate change, as well as my own reflections about methodological choices that were challenged by the pandemic.

Climate change: Definitions and understandings

Climate change, an umbrella term for the extensive changes registered in the Earth's systems, is one of many phenomena to focus on when studying the relations between humans and our surroundings. Climate change is defined in the United Nations Framework Convention of Climate Change (UNFCC) as:

> "… a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods" (United Nations 1992).

Broader definitions include natural processes as causes for climate change (IPCC 2014a). In this thesis, I take the predominant scientific consensus as my starting point, namely that the unprecedented changes in Earth's systems altering ecologies, lives and societies, can be attributed to human activities (IPCC 2014d; Oreskes 2004).

Research on climate change has traditionally been natural scientific studies focused on the measurable aspects of the phenomenon. More recently, social scientific scholars have engaged in research on these changes, arguing that climate change is a social issue – a matter for the social scientific terrain as much as for natural sciences (Norgaard 2016; Urry 2011). From being understood as a purely physical issue, climate change is now considered a matter that permeates social life through its unintended physical, social and cultural consequences (Bee, Rice, and Trauger 2015; Hulme 2009). Climate change is considered the greatest challenge for contemporary societies, and that it alters (human) life (Beck 2009, 2016; Giddens 2011). The issue is global, local and unjust, as changes in Earth's systems happen worldwide, but the extent of the consequences vary in different contexts (Bulkeley 2013).

Comprehensive environmental changes and their widespread consequences have been termed differently in scientific and public debates, for instance as a climate crisis, an ecological crisis or an ecological collapse, to name a few (Hastrup and Rubow 2014; Hulme 2009; Lever-Tracy 2008; Norgaard 2012, 2018). I have chosen the term climate change as it is a somewhat neutral term for the everyday life context that I study. Also, my initial assumption was that more people talk about climate change than, for example, ecological crisis, in daily life. Climate change is a term that is now widely known and used (Bulkeley 2013; Giddens 2011). I used the term climate change as I wanted to approach the context with an openness that allowed the participants to talk about their understandings of the issue without adding too much preconception. In this written thesis, I use the terms climate change, climatic changes and changing climate interchangeably.

Human meaning-makings of climate change

A central question for social scientific research on climate change concerns how to engage people, politicians as well as citizens (A. B. Nielsen and Bislev 2018). This is related to how humans make sense of climate change in various contexts. How humans talk about, make sense of and respond to climate change, is the focus of my research. Social scientific research about human understandings of climatic changes has been stated as equally important or even more important than natural scientific research about the changes themselves, as social scientific research can enhance the understandings of why the climate is changing and how we might respond (Eskjær and Sørensen 2014; Norgaard 2016; Urry 2011). Such knowledge has the potential to provide insights into how we might live in a climate that is changing and possibly reduce risks of accelerated processes. Solving climate change is by now considered difficult, if not impossible (Beck 2016).

In recent years, climate change has gained heightened attention in Danish media and the public, and it has become a phenomenon of concern for most of the Danish population (Concito 2020; Eskjær 2019). Political discussions about climate change often concern either what can be understood as the **causes of climate change** and the **events or consequences of climate change**. The first, causes of climate change, are most commonly discussed in relation to carbon dioxide emissions and what individuals, companies and institutions can do to reduce emissions through **mitigation strategies** (Bulkeley 2013; IPCC 2014c). The second, events and consequences of climate change, concern weather-related changes such as increases in temperature and precipitation or issues related to the country's geography such as rising sea levels, the societal and economic consequences of these events and the **adaptation strategies** that can be initiated (Bulkeley 2013; IPCC 2014b). According to the Danish Meteorological Institute, temperatures and precipitation in Denmark have increased steadily for decades and further increases and more extreme weather are expected (Danish Meteorological Institute 2020b, 2020a).

According to a recent survey done by the Danish green think tank Concito, 86 percent of the Danish population consider climate change to be a somewhat or very serious problem (Concito 2020). The Concito survey shows that the Danes think that more extreme storms and cloudbursts, increased extinction of animals and plants and rising sea levels are consequences that will happen in their lifetime (Concito 2020). On the list of the top ten consequences that the respondents think will happen in their lifetime are also more and larger drought areas, increased lack of drinking water as well as spill-over effects such as increased hunger and poverty as well as more wars and diseases, resulting in increased

numbers of refugees (Concito 2020). As such, the respondents express reflexivity about climate change and possible future consequences.

The sociological inspiration:

Climate change in everyday life

I approach the issue of climate change from an everyday life perspective inspired by sociology, based on an understanding that issues like global climate change are embedded and experienced in everyday life (Bee, Rice, and Trauger 2015; Mills 2000). In everyday life, macro-level phenomena and norms are experienced, lived and acted out on a micro-scale (Bech-Jørgensen 1994; Bee, Rice, and Trauger 2015; Bennetsen 2019; Rose 1997).

As opposed to the focus on numbers, figures and measurable data in political and scientific work, in everyday life, climate change also has to do with situated experiences, meaning-making processes and whatever goes on in the local context of daily life (A. B. Nielsen and Bislev 2018; Norgaard 2011). The social context takes part in the construction of climate change as an issue and ideas about how to respond to it. Sociologist Kari Marie Norgaard (2011) argues that everyday life experiences with and responses to climate change should be interpreted as collective rather than individual, being socially constructed and negotiated. The social context "… can be a significant part of what makes it difficult to respond to climate change" (Norgaard 2011, 209).This thesis is based on this understanding, that climate change experiences and responses are socially negotiated and constructed. This is in contrast to the focus on especially climate change responses as an individual responsibility which has dominated public discussions for decades (Halkier 1999, 2016; Norgaard 2011). I argue that a collective condition such as climate change calls for an intersubjective or social approach. The aim is to explore how we can understand the Copenhageners' small stories as socially constructed and as expressions of the collective condition of climate change, rather than solely individual reflections.

Climate change has previously been understood as a phenomenon of the future, as the anticipation of events, that will drastically change lives in the future (Beck 2009). That the phenomenon has been considered spatially and temporally distant in everyday life for people living in the Global North has made it a challenge to respond to (Giddens 2011; Gundelach, Hauge, and Nørregård-Nielsen 2012; Neimanis and Walker 2014; Nilsen 1999; Norgaard 2011; Ojala 2016). Two sociological studies have had a particular focus on the role of climate change in a Scandinavian everyday life context, one in a small town in Norway (Norgaard 2011) and another focused on young Danes (Gundelach, Hauge, and Nørregård-Nielsen 2012). These studies found climate change to be both "common

knowledge" and "unimaginable" (Norgaard 2011). Also, these studies showed that climate change was not an urgent topic in everyday life, although knowledge about the issue caused concern (Gundelach, Hauge, and Nørregård-Nielsen 2012).
Since the two studies were conducted, however, unusual weather phenomena such as cloudbursts and storms have become more frequent, and climate change has entered the public agenda in Denmark (Eskjær 2019; A. B. Nielsen and Bislev 2018). This makes up a gap in the research field, and I found that this thesis could fill this gap by exploring contemporary stories about the presence of climate change in everyday life. I place the thesis in the line of sociological inquiries of climate change in everyday life and contribute with detailed empirically-founded analyses. I seek to contribute to existing climate change research with an everyday life perspective on the stories told about contextual and situated experiences with and responses to the global phenomenon. One of my basic assumptions is that the geographical, social, historic, cultural and economic context matters for how climate change is storied (Hulme 2009; Jensen 2013; Mills 2000; Norgaard 2012).

My approach is inspired by the sociological understanding that everyday life experiences and global issues are interlinked. Most referred to is probably Charles Wright Mills' idea of **the sociological imagination** which he presented in 1959 (2000). According to Mills, individual biographies and the greater historical context are interlinked and cannot be understood separately (Mills 2000). This resonates with the feminist idea that the personal is political, meaning that (women's) personal experiences matter (Hanisch 1970, 2006). Personal problems are understood as political problems to which there are collective, not individual, solutions, and global issues such as climate change are lived out in everyday life through various embodied experiences (e.g., Bee, Rice, and Trauger 2015). In the words used by Mills (2000), **private troubles** are interlinked with **public issues**. Experiencing that private troubles are also public issues and that public issues are also private troubles might be enhanced in a changing climate through bodily and sensory experiences, such as experiencing extreme weather events, as well as reflexive associations of various mundane situations, such as separating household waste or deciding what to eat. Norgaard (Norgaard 2016, 2018) has developed Mills' concept in relation to climate change and has suggested the term **ecological imagination**, the ability to relate human activities to the climatic or ecological consequences of these, as a complementary concept.

Kari Marie Norgaard's (Norgaard 2011, 2016, 2018) work on the presence of climate change in everyday life has inspired the focus of the research and some of the theoretical choices.

The scope of the research: Climate change in the everyday life of the majority

Some people in the Global North have made fundamental changes to live in ways that are, for instance, less energy consuming or slower, as a response to climate change or related environmental issues. Much research has been done about such people who we might call **pioneers** (Vannini and Taggart 2015). These include people living in communities centred around sustainable living such as eco communities (e.g. A. H. Hansen 2020), people seeking a slower life in Cittaslow towns (e.g. Pink 2012), or people living off the grid (e.g. Vannini and Taggart 2015). Common for such studies is that they concern lives different from those of the majority of people living in the Global North.
I contribute to research about life in a changing climate with the perspective of people belonging to the majority, i.e. people who appear to be living what we might term **average** or **ordinary** lives. They have not made extensive changes in their lives because of their knowledge about climate change, as this seems to be the case for most people living in countries in the Global North.

These years, young climate activists organise across the world in protest for climate action and in hope for better futures (Bowman 2019; Freudendal-Pedersen and Kesselring 2020; Wahlström et al. 2019). This global climate movement started in august 2018, when the then 15-year-old Swedish Greta Thunberg initiated "School strike for climate" – a three week long sit-down strike in front of the Swedish Parliament calling for climate action (Fridays for Future 2021). Thunberg's strike initiated an unprecedented international climate movement of students and other young people around the world participating in weekly school strikes under the name Fridays For Future (Fridays for Future 2021). The majority of these activists are younger than the participants in this project. A study of the participants in the Fridays For Future protests in 13 European cities in March 2019 shows that the majority of the participants were female, in the ages 14-19 years[2] and that many were first-time participants (Bowman 2019; Wahlström et al. 2019).

In Denmark, Fridays For Future and The Green Student Movement still mobilise thousands of young people in strikes, campaigns and demonstrations (Fridays For Future Denmark 2021; The Green Student Movement 2021). There is significant public discontent among these young climate activists, who clearly express their anger and sorrow over the lack of climate action as well as their hopes for better futures in demonstrations and in public debates (Bowman 2019; Stein 2021). It could be interesting to do research with young climate activists because of the massive climate movement and these different forms of engagement and activism (Bowman 2019). However, because I aim to explore the small stories of people leading average or ordinary lives, I chose to focus on the majority, the slightly older Copenhageners who are less visible in the climate movement.

[2] The researchers behind the study write that they did not include children under the age of 14 due to ethical constraints (Wahlström et al. 2019).

Climate change, cities and citizens

The context of everyday life that I focus on is the urban context, particularly the context of Copenhagen. I frame the analysis in the meso-level context of the city, because I, with a background in urban planning, understand the planning of cities to have an essential role for the life in them, and because the municipality is one of the most influential public administrative institutions for everyday life (Bulkeley 2013; Jensen 2013)[3].

In relation to planning, climate change has been termed a **messy**, **wicked** and **super wicked** problem which is unique and difficult (if not impossible) to define and to which there are no simple or clear solutions, making engagement in the issue difficult (Eskjær 2019; Fischer and Gottweis 2012; Levin et al. 2012; Rittel and Webber 1973). With the addition of **super** to the term, it is emphasised that the time for coming up with solutions is running out and that this task is further complicated by weak or the absence of central authorities (Levin et al. 2012). Climate change is considered a prototypical example of a **super wicked** problem, and such problems are a great challenge for policy work at national and municipal levels (Berg et al. 2019; Levin et al. 2012; Rittel and Webber 1973).

In the last decades, cities around the world have launched initiatives to adapt to climate change or mitigate further changes (Betsill and Bulkeley 2007; Bulkeley 2013). Cities have become important in international climate action work, because of the border-crossing character and because cities hold potential for solution development due to their density (Beck and Blok 2016; Bulkeley 2013; Spirn 1984). Because cities are more flexible than national states when it comes to legislative commitments, they are considered pioneers in climate change action (Beck and Blok 2016). Municipal climate-related work relies on the collaboration of many different actors at both international, national and local level. The concentrated consequences of climate change in cities, such as paralysing floods of infrastructure because of cloudbursts or heat island effects increasing the temperature in cities, may enhance a sense of urgency of the issue here (Spirn 1984). Cities have, however, also been named both the "victims and culprits" of climate change, as they are both becoming increasingly vulnerable to climate change and are the holders of large carbon footprints (Bulkeley 2013; Jones 2018). Cities are an important context in which to study climate change-related issues, as these complex networks of actors, interactions, people and ideas are part of both local and global flows and patterns (Freudendal-Pedersen and Kesselring 2018; Graham and Marvin 2001; Sheller and Urry 2006).

[3] I focus on the scale of the city as the primary context, without eliminating the influence from, for instance, the close interactions of family or global processes in the development of small stories in everyday life. I include these aspects in the analysis when mentioned by the participants.

I understand the urban context and everyday life experiences as mutually constituting. Urban planning has to do with "… developing and improving the places where we live and work" (Healey 2010, ix). I argue that how climate change is narrated in daily life is linked with the urban planning of the city. The everyday life perspective holds aspects that can be crucial for future work in Copenhagen, as the successes of municipal goals are not solely a matter of strategies, policies or technologies. Rather, these achievements rely on an interaction with the city's inhabitants and others (Egmose 2015; Freudendal-Pedersen 2016a). Therefore, knowing more about how Copenhageners talk about their experiences and sense-making of climate change is crucial. These stories verbalise aspects about everyday life in a changing climate – aspects that are not always rational or desirable for city leaders, as they sometimes go against the municipal aims for climate change response. Nevertheless, these stories are valuable as they highlight the difficulties of doing things differently in everyday life. Thus, the interplay of everyday life (the staging from below) and planning (the staging from above) are a concurrent dynamic process and mutually constitutive (Jensen 2013). This can be explained as a concurrent dynamic process of **staging from above** and **staging from below** (Jensen 2013). The Copenhageners' stories about climate change are not "just there", but are developed, negotiated and constructed in and influenced by the specific context (Jensen 2013). The geographical, political, historical, cultural, social and economic context of the city poses certain conditions for the development of small stories about everyday life experiences with and responses to climate change, making the city suitable for social scientific climate change research.

The late sociologist Ulrich Beck (2009) argued that because risks such as climate change are events in the future, the staging of risks is essential: "For only by imagining and staging world risk does the future catastrophe become present – often with the goal of averting it by influencing present decisions" (Beck 2009, 10). In this sense, the staging of risk becomes part of preventing catastrophes (Beck 2009). This perspective entails that climate change understandings are not given, but rather that they are developed in the local context and that the ways the phenomenon is staged matter. Particularly interesting for my analysis are the ways that climate change is staged by the City of Copenhagen, rather than what climate change is in a physical or natural scientific sense. Rather than asking what climate change is or even *if* climate change is, the questions that I ask in this thesis concern what climate change is to someone, inspired by mild constructivist approaches (Nilsen 1997; Schwandt 1994). This is not to question the physical existence of the phenomenon, but only to explore how this objective phenomenon is made sense of in various ways in the everyday life context of Copenhagen. I explore the young Copenhageners' small stories about their knowledge and understandings of climate change in their everyday life reality, rather than evaluating whether their stories are true or false or whether the Copenhageners 'get' climate change. (Freudendal-Pedersen 2016b).

The context: Copenhagen

Copenhagen is the context of this thesis. It is the capital city of Denmark, a Scandinavian welfare state with a relatively wealthy, well-educated and equal population, although equality in the population has been changing in recent years (Booth 2014).

Copenhagen is a suitable context for this inquiry for (at least) two reasons. Firstly, the City of Copenhagen has worked strategically with climate change-related issues for more than a decade. In 2009, the city launched its first climate plan with the aim of becoming the first carbon neutral capital city by 2025 (City of Copenhagen 2009b). A couple of years later, in 2011, the city council enacted the city's first climate change adaptation plan, more than a year before a national action plan was developed (City of Copenhagen 2011; The Danish Government 2012). Since then, the City has developed several climate-related strategies and initiatives aiming to adapt the city to existing climate change and to prevent additional changes. These strategies combine climate-related aims with purposes of making the city liveable and attractive to invest in, through surplus value in climate change-related projects (City of Copenhagen 2011, 2012c, 2015). In Copenhagen, climate change initiatives have politically been placed along strategies for economic growth and international attention (Bisgaard 2010; Jones 2018). Initiatives regarding climate change and other environmental issues are encompassed in other effort areas, for instance mobilities, public health or renewal of urban spaces, as presented in the city's action plan for the UN sustainable development goals (City of Copenhagen 2017b).

Secondly, Copenhagen has received massive national and international attention for its work with climate change adaptation and mitigation as well as for its efforts to make the city attractive and liveable (City of Copenhagen 2009a, 2020a; Healey 2010). The city's development over the last 30 years, from being almost bankrupt to becoming an attractive and internationally known green metropolis, has given the city immense attention (Bisgaard 2010). The international recognition for implementing climate change-initiatives in the strategic urban development has made Copenhagen an award winning city that urban administrations look to for inspiration (Jones 2018). With Jensen's (2013) staging idea about the dialectic dynamics between urban planning and life in the city in mind, research on everyday life perspectives expands the area of inspiration that others can turn to Copenhagen for.

In this thesis, I explore how climate change in talked about by a group of young Copenhageners. In the following I present the research question and elaborate it with three subquestions that guide the analytical exploration of the young Copenhageners' small stories.

Research questions

With this research, I set out to explore how climate change is talked about, whether it is by now talked about as less distant in the everyday life of young Copenhageners than what previous research has indicated. In the process of conducting this research, I have explored small stories about how climate change is made sense of and dealt with by a group of young Copenhageners, a group of relative wealthy and well-educated people living in the capital city of a Scandinavian welfare state. The questions of interest concern how young Copenhageners talk about how they encounter, reflect on and make sense of this particular phenomenon in everyday life.

The guiding research question is:

How do young Copenhageners talk about climate change, and how can an analytical exploration of this everyday talk contribute to understandings of climate challenges?

As mentioned, I approach the research question with an understanding of dialectic processes between citizens and cities, individuals and societies or actors and structures. I focus the research on the ways that climate change is talked about to explore how these can contribute to understandings of climate challenges. By this I mean how climate challenges are understood in research and in (planning) practice. For this analytical exploration of everyday life talk about climate change, I have developed the empirically founded concept **small stories**. I define and discuss this concept in the following section.

To answer the research question, I have developed three sub-questions that each focus on different aspects important for the thesis' analyses.

The first sub-question relates to the sociological inspiration of the thesis. The first sub-question is: How can sociological discussions on climate change contribute to understandings of everyday talk about the issue? I answer this question in chapter 3, through a review of discussions and developments in sociologies on climate change.

The second sub-question is: How does the City of Copenhagen stage climate change? This question relates to the framing of the analyses of the young Copenhageners small stories and is inspired by the understanding of the staging of climate change as essential to how the issue is talked about in everyday life. This question is the focus of chapter 4.

The third sub-questions is: How do young Copenhageners talk about climate change? This question is answered in the two analytical chapters, chapter 6 and chapter 7 in which

I analytically explore how the young Copenhageners talk about climate change. I also discuss the challenges and openings that the participants' everyday life talk point to.

The thesis is based on a combination of various qualitative methods, as I explore and interpret reflections, meaning-making processes and nuances in experiences and responses to climate change. I have conducted **20 qualitative interviews** with 21 young Copenhageners[4]. The interviews were combined with elements from photo elicitation and walk-alongs (Harper 2002; Kusenbach 2003). The young Copenhageners were between the ages 20 to 39 at the time of the individual interviews. To validate the preliminary analytical arguments in an intersubjective setting, I have conducted **two online focus groups** with, respectively, five and three of the young Copenhageners who participated in the interviews. I have analysed **municipal documents** about climate change and urban development in Copenhagen and conducted a supplementary **expert interview** with a senior administration official from the municipality of Copenhagen in order to frame the setting of the small stories analyses. In the following, I define small stories.

Small stories about climate change

To analytically explore how climate change is talked about in everyday life, I have developed the concept **small stories**. This approach is inspired by what has been termed the **narrative** and **argumentative turns** in social sciences and in planning theory (Czarniawska 2010; Fischer and Gottweis 2012; Freudendal-Pedersen and Kesselring 2016; Plummer 2001). With these turns, it is acknowledged that language and stories not only describe, but also constitute social realities as ways of being in and understanding the surrounding world (Bo 2016; Fjalland, Freudendal-Pedersen, and Hartmann-Petersen 2017; Halkier 1999). A key argument for studying stories in an urban context is provided by urban scholar Leonie Sandercock (2003) who argues that stories "… can often provide a far richer understanding of the human condition, and thus of the urban condition, than traditional social science, and for that reason alone, deserve more attention" (Sandercock

[4] One interview was a double interview, with two participants.

2003, 12). It is the richness of how the issue is talked about in everyday life that I set out to explore when I initiated the research. Stories have been described as essential in everyday life meaning making and as "… a portal through which a person enters the world and by which their experience of the world is interpreted and made personally meaningful" (Connelly and Clandinin 2006, 375, in Clandinin 2016, 13). Stories, narratives and narrative accounts are often used synonymously (Gubrium and Holstein 2009; Riessman 2008).

Within social sciences, stories have traditionally been understood as consisting of a plot and a protagonist, coherence, a linear development and structured around the classic beginning, middle and end (Riessman 2008; Sandercock 2003). This understanding echoes the ideas of fictional stories such as myths, fairy tales, books and films (Sandercock 2003). at least to divergent understandings of what makes a story exist (Bennetsen 2019; Fjalland 2019). However, not all stories told in everyday life follow such structure and content. Instead, stories can also be understood as "… continuously unfolding accounts, whose extensions move in many directions" (Gubrium and Holstein 2009, 228). The kinds of everyday life stories that I explore in this thesis are not fixed or finished, as they evolve with time and the narrators experiences. Because I interviewed the participants "in the midst" (Clandinin 2016) of their lived experiences with climate change, the participants' stories are snapshots of the stories that are continuously in development.

Small stories is the term I have developed to analyse everyday talk in thesis with attention to the richness and details in the participants' narrative accounts. Small stories can be defined as the fleeting, but detailed everyday life accounts about an issue, that often concern present, past, future and possible events related to an issue. Small stories contain both particularities and typicalities and can widen understandings of the difficulties of making sense of and responding to climate change in everyday life. Small stories contribute to understandings of climate challenges as they reflect challenges and dilemmas in everyday life engagements in climate change. Small stories reflect what is taken for granted and considered challenging about an issue. In this thesis I explore small stories about climate change in everyday life, but the term can be applied to other issues.

Small stories are the situated, multiple, sometimes contradictive accounts of climate change that mirror the complex characteristics of the issue. They are the verbalisations of (some of) the thoughts, habits and practices that we take for granted or consider important. Exploring them may lead to new understandings about how climate change is made sense of and which challenges appear when the issue is encountered in everyday life. Small stories can, at first sight, seem insignificant or too detailed, but they can also be understood as illustrations of broader connections (De Fina and Georgakopoulou 2015), for instance the relations between everyday life experiences and global issues.

Small stories are developed in dialogue with the context and the grand narratives told about a phenomenon, event, city or society.

I have developed the definition of small stories presented here, based on working with the empirical materials, but I am not the first to coin the term small stories. Alexandra Georgakopoulou (2006, 2007) has introduced the term small stories as an umbrella term to encompass a number of types of studies. Georgakopoulou (2015) has argued that small stories have the ability to make ambivalence and inconsistencies or paradoxes in relation to a larger issue visible. Instead of studying this in relation to identity, I make use of the term in relation to how climate change is narrated in an everyday context. The term is widely used in conversation analysis and identity studies, however, I utilise the term for this thesis in a different sense.

Although the term small stories can make one think that they are insignificant, I consider them important because of the dialectic relations between everyday life meaning-making processes and the urban context:

> "Narratives are shaped by contexts, but they also create new contexts by mobilizing and articulating fresh understandings of the world, by altering power relations between peoples, by constituting new practices" (De Fina and Georgakopoulou 2015, 3).

This echoes the understanding introduced with the narrative turns presented above, namely that stories constitute and shape social realities. I work with these dialectics in my interpretations of how everyday life stories about climate change are not developed from nowhere, but from "somewhere in particular", the context of everyday life (Berger and Luckmann 1989; Carstensen 2016; D. Haraway 1988). Meaning-making processes are considered an essential part of everyday life and human life, and although (everyday) life does not always seem to make sense, humans try to find or create meaning (Bech-Jørgensen 1994; Bo 2016). Human beings create meaning of lived experiences through stories in interaction with others, humans as well as non-humans and social as well as material structures (Hartmann-Petersen 2009; Lincoln, Lynham, and Guba 2018).

I understand small stories as concurrently particular and typical (Delmar 2010). In other words, the small stories are both individual and collective verbalisations and should be considered this way. By exploring the small stories and giving these space in the analysis, I attempt to write in a way that encompasses the particularity as well as the typicality of the small stories. In the analytical exploration of the small stories, I focus on the content of them, rather than on how they are performed or what role they play in the participants'

stories about themselves. In the analytical development, I have looked for patterns in the small stories, across the individual interviews and the focus groups.

These stories are different from, but related to the **big stories** or **grand narratives**, **discourses**, the **biographical life stories** and **structural stories** (Andersen and Hovgaard 2010; Freudendal-Pedersen 2016b; Hartmann-Petersen 2009; Thomsen, Bo, and Christensen 2016). I have developed the concept of small stories, inspired by the works of others, especially Freudendal-Pedersen's (2007, 2016b) **structural stories**. Like the **structural stories** (Freudendal-Pedersen 2016b), I understand small stories to be not solely expressions of individuals, but structurally conditioned. Small stories are related to, but different from structural stories. Some of the small stories resemble structural stories, but in general, small stories differ from structural stories in that they contain an attentiveness to ambivalence, but are not always contradictory. Small stories can be understood as placed between the condensed structural stories and long ethnographic fieldwork representations (e.g., Geertz 1973). Structural stories are condensations of common stories about an issue (Freudendal-Pedersen 2016b), and small stories are detailed accounts that reflect what is taken for granted and found challenging about an issue. The small stories can point to possible openings for change. The details and richness of small stories supplement the structural aspect of structural stories, and the two are complementary.

By emphasising the contextual aspect of the development of small stories about climate change, I stress that both small stories and what we might call big stories or grand narratives are important for how an issue such as climate change is made sense of in everyday life. Big stories or grand narratives are, in this understanding, the institutional stories that are told about an issue, for instance liveability and sustainability as the municipal answer to climate change (Thomsen, Bo, and Christensen 2016). The relations between small stories and grand narratives are that grand narratives can be found in small stories, but small stories are difficult to find in grand narratives about an issue. Engaging in small stories can point to important aspects, nuances and contradictions that are not part of the grand narratives, but are essential in everyday life understandings of an issue.

The small stories go beyond the accounts of actions and the technological terms used in the municipal plans and visions. Sometimes grand narratives, such as the municipal stories about climate change response action, are reflected in the Copenhageners' small stories, for instance relating to the narratives about sustainability and economic growth. But some small stories contain aspects of climate change responses that are not immediately desirable for the urban administration. These are the kinds of small stories that are not in accordance with official stories or what is expected (Georgakopoulou 2015). Often,

they are both-and stories, containing accounts about the ambivalent and paralysing effects of climate change. Exploring these, we might learn about some of the challenges and openings related to placing responsibility for climate action on individuals. In the thesis, I analyse the relations between grand narratives about climate change in Copenhagen and the young Copenhageners' small stories. In chapter 4, I analyse how climate change is staged in Copenhagen and point to grand narratives about climate change in Copenhagen. In the analyses of the small stories, I relate these to the grand narratives, when these are echoed in the small stories.

By analysing the participants' narrative accounts, I explore and interpret how the phenomenon of global climate change is talked about as lived, told, relived and retold in an everyday life context (Clandinin 2016). I seek to analytically unfold nuanced perspectives beyond the dualistic understandings of how young adults in the Global North talk about how they make sense of and navigate global climate change. If research aims to get closer to meaning-making processes behind different kinds of responses to climate change in everyday life, we must listen to the small stories from the everyday routines, in order to explore the nuances in the messy and sometimes irrational logic that appears in the attempt to create meaning of a complex issue in everyday life.

I analytically explore the small stories about experiences with and responses to climate change, rather than the experiences and responses themselves, as I follow the ideas of narrative inquirers; that stories are the closest we as researchers can come to others' experiences (Clandinin and Connelly 1994). The qualitative methods that I have applied in this project concern the verbal constructions and meaning-makings of experiences and responses, and not the actual experiences or response practices.

Small stories are continuously developed by the narrator (Carstensen 2016; Georgakopoulou 2006; Phoenix 2013). Doing research with people entails that we as researchers enter "in the midst" of the everyday lives and lived experiences of the people participating in the research (Clandinin 2016). This means that the small stories presented in this thesis will stay as I have written them, but the numerous stories that the young Copenhageners tell will develop as their lives continue after they took part in this project: "Our social science knowledge is, like the things we study, something "in passing"" (Clandinin and Connelly 2000, 19). Seen this way, stories are "continuously unfolding accounts" (Gubrium and Holstein 2009) that are in motion. I understand that the young Copenhageners make sense of and talk about their experiences based on their experiences in the past and present and their anticipation of the future and that these therefore change and are in constant development (Clandinin and Connelly 2000).

One thing is the reflexivity and knowledge with which we think about climate change. How we act in relation to climatic changes, is a different matter (Hartmann-Petersen 2009). In this thesis, I focus on the stories that humans tell rather than on the actual actions or practices of living in a changing climate, while acknowledging that doings (what we do) and sayings (how we talk about it) are related and mutually influencing (Freudendal-Pedersen 2016b). Practice theory approaches, for instance, present another entrance to the study of climate change in everyday life. Whereas proponents of practice theory approaches argue that both sayings and doings are important, as both constitute practices (e.g., Schatzki 2002), I analyse how climate change is talked about in everyday life. Despite differences in the importance attached to language, there are similarities between my small stories approach and practice theory approaches. For instance, practice scholars consider practices as social rather than individual and assume that the material surroundings are important for human lives (Halkier 2016; Pink 2012; e.g., Schatzki 2002; Shove, Pantzar, and Watson 2012). I consider my small stories approach and practice theory approaches complementary rather than contradictory.

By focusing the research lens on small stories told in everyday life, we might enhance the understandings of the complexities in how climate change is experienced and understood differently in everyday life. Small stories are obviously not the only way to study the everyday life perspectives of climate change, but they are important as they hold aspects that might otherwise be overlooked in political or scientific assessments of the issue.

Researching with young Copenhageners

I focus this research on a demographic group that I term **young Copenhageners**. The participants lived in Copenhagen and were aged 20-39 years at the time of the first meeting. I approach the young Copenhageners with an understanding of both **life phase** and **generation** which allows me to understand the participants as someone who are in a time of their lives where they have to make a lot of life choices as well as someone who live and have grown up in a particular time and place (Halkier 1999; Illeris et al. 2009).

I term the participants young Copenhageners to emphasise their attachment to Copenhagen, but the term **young adults** was an inspiration for the choice of this group (Illeris et al. 2009). The term young adults encompasses young people who have a high educational level, are part of the educational system until they are somewhere in their 20's or later, who predominantly reside in larger cities and who 'settle down' later in their life

than young people at their age did 50 years ago[5] (Illeris et al. 2009, 32; J. C. Nielsen 2019; Nilsen and Brannen 2013). The term young adults especially focuses on what can be categorised as the middle-class and upwards, as the relation to the educational system is essential in the definition and usage of the term (Nilsen and Brannen 2013).

Changes in societal conditions are said to adjust our understandings of youth, and the term young adults mirrors the extension of the time, or phase of life, between childhood and adulthood that many young people experience (Illeris et al. 2009). Young adults are interesting to do research with, as they experience many changes in this phase of life and they must make a lot of choices about their life at this time, for instance relating to education, occupation, residence and commitment to partners (Gundelach, Hauge, and Nørregård-Nielsen 2012; Halkier 1999; Illeris et al. 2009). The habits and choices that young people make in their transition from being teenagers to being adults are considered to impact their lives in the future (Gundelach, Hauge, and Nørregård-Nielsen 2012; Stanes and Klocker 2016). From an urban planning perspective, the young Copenhageners are interesting because of the life changes and challenges they go through during this phase of their lives. Further, young people are mentioned to have more at stake in relation to climate change, compared to people who are older than them. Young adults will probably live longer than the older generations and thus live to experience and possibly suffer from future changes to a larger extent than older generations (Gundelach, Hauge, and Nørregård-Nielsen 2012). Younger generations today have been called **risk generations** or **generations of side effects** (Beck, 2016), who do not have a choice but to live with the risk of climate change and other side effects of modernity (Beck 2016).

The participants can also be termed members of **generation y**, so-called **millennials** (Branner 2016; Rouse and Ross 2018). Around the time I started the research process, much attention was placed on millennials or generation Y in international media, stating that this generation differed from older generations regarding their ways of life, online presence and opinions about climate change and sustainability (e.g. Branner 2016; Goldman Sachs Global Investment Research 2015). This led me to perceive millennials, young people from that generation, as interesting to do research with. The international focus on generations and intergenerational differences in relation to climate change, especially between the so-called millennials and the baby boomers (the generation of people born in the period following the end of the Second World War), seemed to culminate in November 2019. The then 25-year-old member of the New Zealand Parliament Chlöe

[5] 'Settling down' or finding a partner to start a family with is used as a parameter in the literature referred here. I include it as one aspect of many, although I am aware of its conform and heteronormative connotations in relation to ideas about what it means to be an adult.

Swarbrick responded "OK, boomer" as she was interrupted by an older member of parliament during a speech about a zero carbon bill (BBC 2019; Mezzofiore 2019). This served to fuel the fame of this phrase and it almost instantly became a world-renowned phrase that young people worldwide use in indignation towards people older than themselves. This archetypical feud of generational differences has gained a lot of attention in public debates in recent years, and the ease with which people in a certain age group are typecast may be good for discussions, but is less interesting for research. In chapter 2 I elaborate on my reflections about this demographic sampling criterion.

The young Copenhageners are entitled to vote, and are presumably in transitional phases of their lives that entail making choices relating to place of residence, education, work, friends, partners, family and other changing life situations, decisions that are considered important for their future decisions, norms and habits (Gundelach, Hauge, and Nørregård-Nielsen 2012; Stanes and Klocker 2016). In addition, the participants belong to a large group of inhabitants in Copenhagen, as the city's demographic composition is younger and the average age is lower, compared to the rest of Denmark (City of Copenhagen 2020c). In 2020, the average age of Copenhageners was 36.1 years, compared to the general Danish average age, which was 41.8 years. I elaborate on the demographic details of the participants in Chapter 2, but in short, in this context, the participants are an interesting group to study, as they belong to the majority of Copenhageners, in relation to age, educational level and labour market attachment. In a global sense, they are part of a privileged western elite and, in a local sense, they belong to the majority of Copenhageners.

The young Copenhageners are privileged in the sense that they not only have a place to live , but also are educated and have an income, either from employment or grants. But why should we study these socioeconomically affluent people, living in a wealthy country? For research, such reflections and experiences made by some of the people in the Global North, hold important aspects. Norgaard (2011) writes about her choice of doing research in Norway: "If any nation can find the ability to respond to this problem, it would be a place like Norway, where the population is educated, cared for, politicized, and environmentally engaged" (Norgaard 2011, 233). Norgaard calls her study a "distilled version of dynamics" which could also be present in other places (Norgaard 2011, 233). Likewise, studying the everyday life small stories of well-educated and somewhat wealthy Copenhageners might be distilled versions of dynamics experienced elsewhere.

Exploring small stories of young Copenhageners with a double view

Through the research process, I have become increasingly aware of the necessity to explore beyond either/or-distinctions when doing social scientific climate change research.

This applies to how I approached the context as well as the analytical work. The first point of relevance of moving beyond such distinctions has to do with the choice of participants, the young Copenhageners. Research concerning environmental issues and young people in the Global North often concern two somewhat paradoxical statements, namely that they are either thoughtless, hedonistic and wasteful consumers or that they are the environmentally conscious hope of the future; as either engaging in formal activist climate movements or not engaging at all (Bowman 2019; Stanes and Klocker 2016). Approaching young Copenhageners with a dualistic view, as either one or the other, does not seem beneficial in a research context, as most people will hardly fit in only one of the two static categories (Bowman 2019; Stanes and Klocker 2016). Instead, if understood as end points of a continuum in which young people navigate, the two statements may be helpful in broadening the understanding of how young people in the Global North navigate climatic changes in their daily life. We might see them as people who respond in different ways, and as people who are both concerned and knowledgeable about climate change and who lead resource demanding lives, embedded in a society in which consumption is a strong presence in everyday life (Bowman 2019; Stanes and Klocker 2016). A similar argument has been presented by Norgaard (2011), who argues for a double view of compassion and critique, when studying climate change among environmentally privileged people in the Global North:

> "… let us approach privileged people simultaneously through the lens of compassion and the lens of critique. Privilege is a precarious position. People occupying privileged social positions encounter "invisible paradoxes" – awkward, troubling moments that they seek to avoid, pretend not to have experienced (often as a matter of social tact), and forget as quickly as possible once those moments have passed" (Norgaard 2011, 217).

Approaching the research question with a double view of compassion and critique allows me to understand environmental privilege as more than purely positive. Although Copenhageners do not regularly face devastating consequences of climate change in their daily lives, "dark" concerns about consequences of the issue for people living in other parts of the world, can be part of their reflections about the issue (Norgaard 2011).

Copenhageners are, along with most inhabitants in the Global North, environmentally privileged in the sense that their livelihood is not currently threatened by climate change, with many living what has been termed **high-carbon lives** in **high-carbon societies** (Norgaard 2011; Urry 2011). Environmental privilege can be explained as learning about climate change instead of experiencing devastating consequences of such changes (Norgaard 2011). This means that we ought to ask different questions in this context than if we are, say, doing research in places where homes, traditions and societies are currently

threatened by rising sea levels (Norgaard 2011). This thesis explores the ways climate change is made sense of in areas of the world where climate change has not (yet) altered lives in the same sense as in other places of the world.

This double view of compassion and critique, a both-and-approach, allows for perspectives beyond the dualistic distinction of young Copenhageners as either indifferent or deeply concerned about climate change. It allows me to understand that young Copenhageners who might not be threatened on their livelihood today, might cope with troubling knowledge of the lives of others in their reflections about climate change.
According to a European study, Danes have the seventh highest carbon emissions in the world, equivalent to approximately 19 tons each year (Tukker et al. 2014). These numbers showing a high level of carbon emissions, can give the impression that Danes are indifferent to climate change and simply do not care. One could think that if people cared about climate change, they would reduce their carbon emissions. But, as sociologist Stanley Cohen reminds us: "Passivity and silence may *look* the same as obliviousness, apathy and indifference, but may not be the same at all. We can feel and care intensely, yet remain silent" (Cohen 2001, 9, original italics). It has been my intention to move beyond what high-carbon lives in the Global North might look like and analytically explore the small stories about how climate change is experienced and responded to in everyday life – with a double view of compassion and critique, as Norgaard (2011) has recommended.

Structure of the thesis

In this chapter I have argued that everyday life is an important aspect of urban planning as the two are inextricably entangled and mutually constitutive. Through the following chapters I make the case that small stories about experiences with and responses to climate change are essential in climate-related work in an urban context, as it is through these diverse stories that we can learn about the width of how climate change interferes with everyday life and takes part in everyday life reflections and actions.

In **chapter 2** I present the research design, the empirical materials and argue for the methodological choices that I have made in the process, while discussing the advantages and limitations of my qualitative and explorative approach. Lastly in the chapter, I consider the quality of the research and present the analytical strategy.

Chapter 3 introduces the thesis's theoretical sociological inspirations. This chapter makes up the theoretical foundations I base the project on. I place the thesis theoretically

in line with sociological perspectives on climate change. In this chapter I review discussions and developments in sociologies of climate change, through a conceptualisation of the fours waves, climate change as respectively, a **social issue**, a **construction**, a **risk** and a **condition for everyday life**. This chapter form the foundation for the theoretical framework, that I present in chapter 5.

In **chapter 4** I frame the context for the analyses of the young Copenhageners' small stories. Based on the understanding of dialectic processes of the (urban) context and everyday life experiences within, I outline how the City of Copenhagen stages climate change. Sociologist Anthony Giddens (2011) argued in his book on climate change politics that an essential problem was that there were no climate change politics and that the political structures were not able to accommodate the issue. However, in the last decade, climate change has entered the political agendas in cities and nations. In this chapter, I argue that the City of Copenhagen approaches climate change in three ways: *The City of Copenhagen works to mitigate further changes, adapt the city to current and future changes, and collaborate with other local, national and international actors with the aim of becoming a liveable and resilient city.* This chapter represents the urban planning level, with help from the idea of **staging from above** (Jensen 2013). The inspiration for writing this chapter was the understanding that small stories and meaning-making processes are developed in dialectic processes between the individual and their surroundings, as I have presented in the introductory chapter.

In **chapter 5** I present the theoretical framework for the analytical exploration of the young Copenhageners' small stories. The concepts are primarily sociologically inspired, but because of the varieties and nuances of the participants' small stories, I have also added concepts developed by anthropologists, geographers, mobilities researchers and feminist thinkers. These are the concepts that I operationalise to make use of them in the micro-level analysis of the participants' narrative accounts. The concepts presented in this chapter make up the core of operationalised concepts, but I have added some concepts directly in the analytical chapters.

The young Copenhageners' small stories are the analytical focus in **chapter 6** and **chapter 7**. The two chapters are analytically divided into small stories about experiences with and about responses to climate change, respectively. The analytical categorisation makes room for climate change as talked about both in terms of physical and sensory experiences as well as associations of various mundane situations evoking responses.

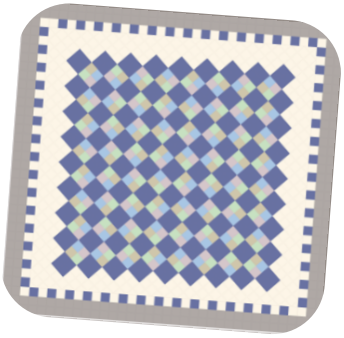
In **chapter 6**, I explore small stories about experiences with climate change as multiple, situated and socially negotiated experiences that are often related to previous experiences and ideas of the future. The small stories about climate change experiences imply that in everyday life these are not isolated experiences, but related to other everyday life experiences and reflexively associated and made sense of in dialogue with others. Many of the young Copenhageners relate climate change to experiences with weather changes. I conclude the chapter by discussing how the small stories about experiences are accompanied by uncertainties.

The focus of **Chapter 7** is on small stories about climate change responses. This chapter concerns small stories about reflections on how to respond to what they experience. I initiate the chapter by exploring how the participants talked about various mundane situations that they relate to climate change in the sense that they evoke thoughts on how to respond to the issue. In the second part of the chapter, I point to three challenges relation to individual everyday life abilities to respond to global climate change. Concluding the chapter, I discuss possible openings for change, based on the participants' stories.

In **chapter 8**, I bring together the conclusions from all chapters and present the contributions of the thesis. In the end of the chapter, I discuss how the research has given rise to new questions to as in future research on climate change in everyday life.

Before turning to the empirical materials and methodological choices made in the research process, I present the patchwork quilt as a metaphor for how I have worked.

Research as patchwork quilting



To visualise how I have worked with the research questions, I invite you to think about a **patchwork quilt**. The patchwork quilt is an inclusive metaphor which has been researched by various scholars (e.g., Deleuze and Guattari 2000; Flannery 2001; Koelsch 2012; Saukko 2000). I use this metaphor to illustrate both my research process and the construction of the written product.

The research process as patchworking

With a metaphor, the somewhat abstract research process is made visible and takes form because of the familiarity and recognisability that the metaphor creates. Metaphors have the ability to illustrate in rich detail, but they come with risks of describing the process

too simplistically or foregrounding parts of the process, because they fit the metaphor better (Flannery 2001; Jensen 2013). I try to make up for these risks by writing examples from the analytical process in the following presentation.

I have chosen patchwork quilting as a metaphor for the research process for two reasons: Firstly, the image of sewing a patchwork somewhat resembles the abductive research process. The research process has been about sorting and constructing new patterns out of both the empirical and theoretical parts, or patches, if you will. This process has entailed constructing both the research question and the preliminary codes and categorisations, trying them out, adjusting and developing them in dialogue with the empirical material, methods and theoretical writings. I had to look for new theoretical perspectives, when new perspectives appeared from the empirical materials, in accordance with the abductive approach that I have made use of throughout the research process (Blaikie 2011; Halkier 1999). I present the strategy for the development of the analytical chapters in detail in chapter 2.
Secondly, the metaphor of patchwork quilting gives different connotations than other commonly used metaphors for social inquiry. These are metaphors that are often related to traditional male experiences, such as using tools to build arguments like the builder, conquering or discovering the unknown like the explorer and even hunting a prey like the hunter (Flannery 2001). Alternative connotations to the traditionally aggressive masculine ones might make research more inclusive. Feminist thinkers have long argued that the metaphors used for scientific inquiry impact the ways science is done, and that other, sometimes less aggressive, metaphors are needed (Flannery 2001; Koelsch 2012).

There are similarities between the image of the social scientist as a quilter and the well-known image of the bricoleur, often credited to Claude Lévi-Strauss (Denzin and Lincoln 1994). Both the quilter and the bricoleur make use of what is at hand and have not decided on methods, strategies and empirical methods in advance (Denzin and Lincoln 1994, 2012; Flannery 2001). Denzin and Lincoln write that the bricoleur "… understands that research is an interactive process shaped by his or her personal history, biography, gender, social class, race, and ethnicity, and those of the people in the setting" (Denzin and Lincoln 1994, 3). The product of both the bricoleur and the quilter is considered a "… reflexive collage or montage; a set of fluid, interconnected images and representations" (Denzin and Lincoln 2012). Keeping the feminist argument about different connotations of different metaphors in mind, I make use of the (traditionally feminine) image of the quilter working with thread and needle to sow together pieces of diversely patterned fabrics, instead of the (traditionally masculine) image of the bricoleur using tools like screws and a power drill to build.

Although I have written this thesis alone, I have been in dialogue with many people through the process. Both patchwork quilting and researching are social and collective processes as neither quilting nor research is possible to do as a solely individual project (Flannery 2001). Similar to the sewing of a patchwork quilt, conducting this research has only been possible because of conversations with others; for instance hearing the participants' stories and reading and discussing the texts, thoughts and writings of others:

> "A research project often involves ideas and information that have been around for years but that may be used in a new context in the present work. Such a project is a patchwork of techniques and pieces of information that may have been gathered at very different times and in very different contexts but that happen to fit into the solution of the problem at hand. Scientists and quilters both spend their time trying to fit pieces together to make a pleasing whole, and often, this involves playing with the pieces, rearranging them to make them fit and to allow them to be used most effectively" (Flannery 2001, 633).

Much of the theoretical inspiration for this thesis are works that were developed in other contexts or with different purposes than the one that I have for this project. When I make use of theoretical concepts that were developed either many years ago, in different contexts or with a different purpose than here, I try to make them fit the whole of this project by describing the arguments for using them here, relating them to other theoretical concepts that I use and presenting the origin of the concept.

The patchwork quilt metaphor works with my constructivist roots, because it visualises research as a process of constructing rather than uncovering knowledge (Flannery 2001). I write about my ontological and epistemological inspirations and return to the research process and strategy for the analysis in chapter 2.

Constructing the thesis as patchwork quilting

This thesis is the written product of the work I have done during the last three and a half years. Although it contains many details about the research process, it does not mirror the entirety of the process. Some parts are visible in this written thesis while other are not. In the patchwork quilt, only the front and back are visible. Thinking of the construction of this thesis as patchwork quilting, the front is the written thesis, and the back is the research question that holds the quilt together (Flannery 2001; Koelsch 2012). In between is the batting, and although it is not visible, this middle part is essential (Flannery 2001; Koelsch 2012). The batting of this thesis consists of the many lines of thought that helped me develop the analysis, the drafts I have written and later rewritten, and the small choices that I have made in the process. Some scholars have made literal use of the

patchwork quilt metaphor by creating a physical or virtual patchwork quilt based on interviews (e.g., Koelsch 2012). I use it to illustrate the construction of the thesis in a more abstract sense.

One of my research interests has been to analytically explore connections between diverse small stories told by individuals and the staging of climate change in Copenhagen. The patchwork quilting metaphor is helpful for how I have constructed the thesis with attention to these dialectic connections between nuanced small stories told by individuals and grander narratives formed in society, as Paula Saukko (2000) has argued. Presenting the empirical materials by stitching quotes from different participants next to each other and theoretical perspectives makes it visible that I have taken the small stories from their original context and placed them in another, with an analytical aim (Koelsch 2012; Saukko 2000). This way, some of the richness of detail from the interviews has a place in the written thesis, while it is hopefully clear that the small stories presented are understood not only as individual accounts, but also as socially constructed and negotiated ways of talking about the global issue. Understanding the written thesis as a patchwork quilt entails an appreciation of this double role of the quotes, that they are possible to appreciate both as individual items and as part of a whole (Koelsch 2012; Saukko 2000).
Further, this image of the thesis as a patchwork quilt works to emphasise that no research can fully grasp the entirety of the young Copenhageners' small stories. Instead, through research, I can bring them together with scholarly perspectives that frame them analytically to develop analytical patterns that might widen our understandings of how climate change is made sense of in numerous ways in an everyday life context.

In contrast to the embroidered quilt which has a neatly stitched and recognisable motif at the centre, the patchwork quilt has no single centre, but is composed by a number of smaller patches that, when stitched together, can be appreciated as a whole or individually, if one focuses on the details of the various patterns (Deleuze and Guattari 2000; Koelsch 2012; Saukko 2000). The work I have done in the process does not conclude with a theory of climate change in everyday life. The idea of a single theory that captures the entirety of the research is in line with the embroidered quilt (Saukko 2000). Although developing a single theory might sound tempting in the simplicity of its explanatory force, one such cannot encompass the complexities and richness of how climate change is storied in everyday life in a local context. The description of climate change as a **super wicked problem** entails that no single theory can encompass the many nuances of the issue (Levin et al. 2012). Instead, the conclusions of this thesis reflect the double view of compassion and critique with which I have approached the research.

Chapter 2

Doing the research: Materials and methods

In this chapter I present the research design, methodological choices that I have made in the process and the thesis' ontological and epistemological roots and discuss the advantages and limitations of the approach. I start by introducing the research design and my qualitative approach. Next, I present the scope of the research, details about thepparticipants, the methods that I have used and the limitations of the thesis. Concluding the chapter, I consider the quality of the research and present the strategy of analysis.

Research design

This thesis contains a qualitative inquiry into how climate change is narrated in everyday life by a small number of participants, specifically 21 young adults living in Copenhagen, a group of people that I term young Copenhageners. My aim has been to explore how climatic changes are constructed in everyday life in different ways rather than to uncover general or objective truths about the matter. The qualitative approach is said to be particularly useful in research where the aim is to interpret in depth how a group of people talk about and make sense of an issue, in this case of climate change (Elliott, Fischer, and Rennie 1999; Neergaard 2007). My ontological and epistemological roots grow in critical, constructivist, phenomenological and interpretive traditions (Denzin and Lincoln 2018; Halkier 1999). Researching and writing from these roots I developed a design that enabled me to explore and interpret the richness and details of the empirical materials in consistency with implications of these roots (Olsen 2003). In the following I present how I have conducted the research, I relate my methodological choices to literature on the methods and reflect on what I have learned from episodes and strategies that did not go as planned, with the intention of making the process transparent.

In short, I have conducted **20 qualitative interviews** with the 21 young Copenhageners, as one was a double interview with two participants. I added elements of **photo elicitation** and **walk-alongs** to the interviews (Harper 2002; Kusenbach 2003; Kvale 1996). To validate my preliminary analytical categories and to explore further analytical aspects in an intersubjective setting, I conducted **two online focus groups** (Abrams and Gaiser 2017; Halkier 2018). Eight of the young Copenhageners participated in a focus group, respectively five and three in each focus group.

I approach everyday life experiences as situated in a specific context. I consider the lived life (in cities) and the planning of the (urban) surroundings in which everyday life is lived as mutually influencing and therefore the (urban) planning perspective to be essential in studies of everyday life (Jensen 2013). To include the urban planning perspective in the analysis I have **analysed municipal documents** (Lynggaard 2015) about climate change and urban development and conducted a **supplementary expert interview** (Kvale 1996) with senior administration official from the municipality of Copenhagen Lykke Leonardsen. I make use of these to outline (some of) the grand narratives about climate change in Copenhagen as well as the city's approach to the issue.

I have combined various qualitative methods, as my aim has been to explore and interpret different perspectives of small stories told about climate change in everyday life. The methods I have combined have different advantages and disadvantages and evoke different perspectives, because of their various forms and dynamics. The term **triangulation** is widely used to describe the combinations of various methods or perspectives which contribute with different data types, additional knowledge or levels of knowledge to research (Flick 2018; Frederiksen 2015; Hartmann-Petersen 2009; Launsø, Rieper, and Olsen 2017). The term is often associated with approaches aiming to ensure solid results and accurate or objective truthful conclusions, based on ideas of a fixed reality (Frederiksen 2015; Hesse-Biber 2012; Saukko 2003). Laurel Richardson has presented an alternative to the fixed triangular form with the metaphor of a **prism** or a **crystal** (Flick 2018; Richardson 1994; Saukko 2003; Stehlik 2004). Thinking of the combination of various methods as crystallisation, enhances the understanding that methods and perspectives matter for the conclusions that are drawn from the research (Richardson 1994; Saukko 2003). What appears to the viewer of the crystal, depends on the angle at which the viewer is looking (Richardson 1994). That the angle or perspective matters resonates with the understanding that the research is produced in a particular setting, between me, as the researcher, and the people participating in the interviews and focus groups at the particular time and place that they were conducted (Saukko 2003). How the empirical materials are interpreted also depends on the researcher's perspective. The aim of combining different methods is, Richardson argues, "… a deepened, complex, thoroughly partial, understanding of the topic" (Richardson 1994, 522), rather than to find or uncover a complete knowledge about the reality of a phenomenon (Saukko 2003).

In this exploration of how climate change is talked about in everyday life by the participants, the use of various methods may evoke various aspects of the complex issue (Denzin and Lincoln 2012; Frederiksen 2015; Hesse-Biber 2012; Richardson 1994). Add-

ing a visual element (the photo elicitation element) and movement (the walk-along element) changed the format of the interviews, from solely still and verbal to partly sensory and moving. The parts of the interviews where the participants talked about their photos or we walked around in the neighbourhood, seemed to spur different topics and memories in the Copenhageners' answers, than when we were just sitting down and talking. I elaborate on this later in this chapter. The focus groups add an interactive perspective, as the participants discussed the analytical categories that I presented to them. The interactive perspective was not available in the individual interviews (Morgan 1997; Peek and Fothergill 2009), although the double interview did include interaction between the two participants[6].

The analytical process of this research has stretched over most of the time I have worked on it, from my initial wonderings about the role of climate change in daily life to writing up the conclusions. As Amanda Coffey and Paul Atkinson (1996) write, qualitative work is seldom separated in clearly distinct phases. Instead, qualitative analysis is more of a reflexive activity throughout the research process (Coffey and Atkinson 1996). Likewise, Denzin and Lincoln (2018) note that the qualitative researcher does not 'write up' data that she/he/they have "collected". Rather, the findings in qualitative research are considered interpretations that are constructed in dialogue with the developing materials (Denzin and Lincoln 2018). In the analysis, I have decided which quotes from the small stories I include in the thesis to fit the storyline of it: "Just as interview participants tell stories, investigators construct stories from their data" (Riessman 2008, 4).

Much research is presented as linear progressions, but it is my experience that research develops in uneven motions in and out of different routes, through detours and some dead ends in the process of producing, writing and rewriting the material. Despite the linear structure of this written product, the analytical process has been winding and bumpy, as is the case for much qualitative research (Clandinin 2016; Fjalland 2019). This dynamic development is an inherent feature of an **abductive research process** (Blaikie 2011; Freudendal-Pedersen 2007; Hartmann-Petersen 2009). In the abductive process, I have taken turns at various condensations and analytical categories. Some turned our too broad and some turned out too narrow, and I have sometimes felt that I was moving backwards or in circles. I elaborate on the strategy for the analysis at the end of the chapter. On the next page, I have inserted a timeline which shows how I have worked with the empirical materials, methods and analysis in 2019 and 2020.

[6] The double interview was a pragmatic choice I made, because one of the participants preferred to bring a friend to the interview. I had not previously thought about conducting double interviews, but I realised that the interactive possibilities of the double interview would have been interesting to explore in future research, because of the dynamics of the format.

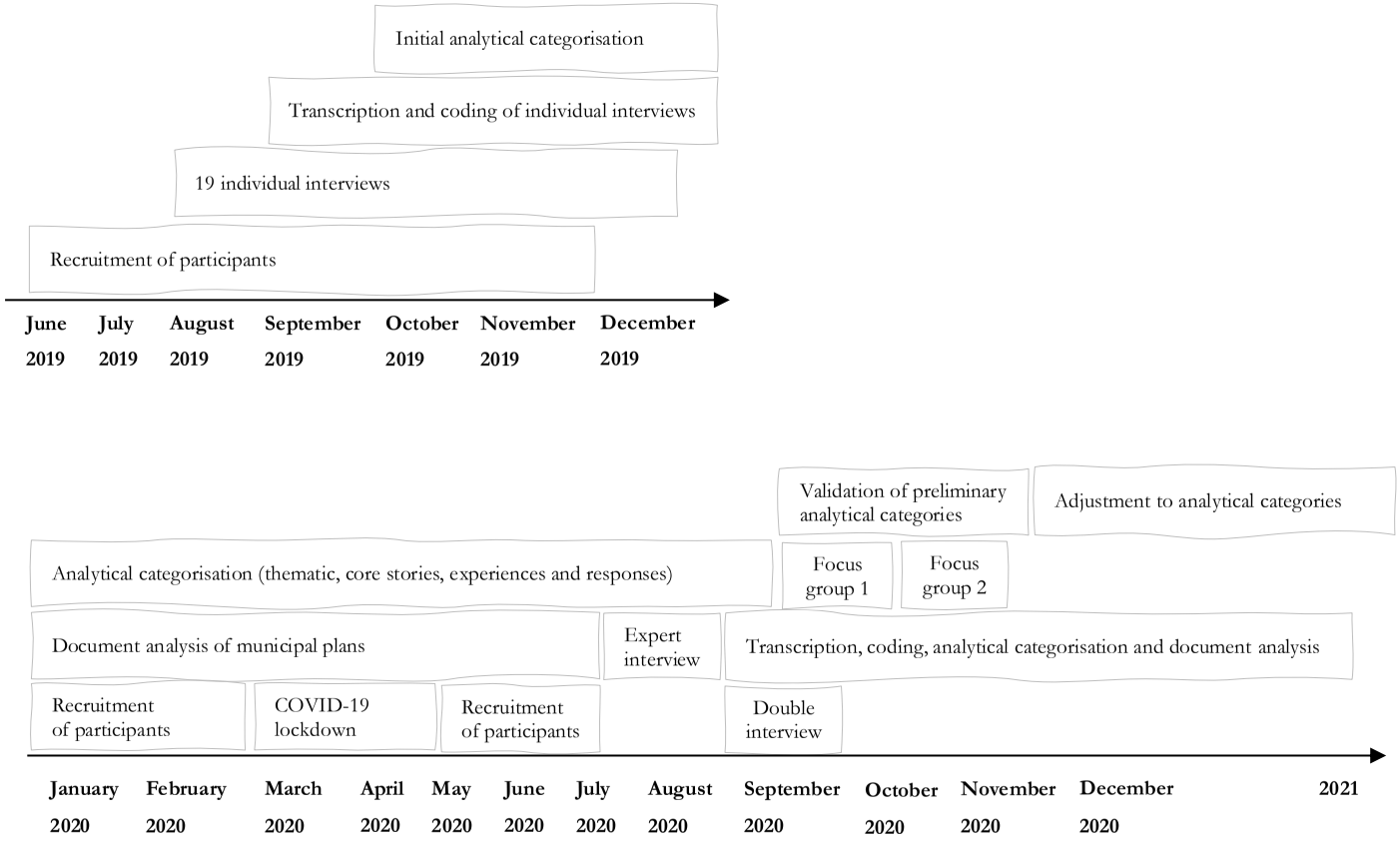


Figure 1: Timeline of my work with the empirical materials, methods and analysis in 2019 and 2020.

The kind of research:

Ontological and epistemological reflections

As noted, my ontological and epistemological roots grow in critical, constructivist, phenomenological and interpretive traditions. I borrow the term ontological and epistemological **roots** from sociologist Bente Halkier (1999). This term encompasses how ontological and epistemological groundings inspire and guide decisions in the research process and form the limitations of the analyses and conclusions. Thinking of ontology and epistemology as roots helps me understand that these reflections grow from somewhere and can develop, rather than being a kind of confessional art. The image of the thesis is then one that has developed, or grown, from a stem connected to roots that are not visible. Underneath the text, or surface, are the roots that grow in various directions, but meet where the stem sprouted. The roots that this research grow from are not fundamentally opposing, some of the traditions that I am inspired by have grown from others, and the different traditions have been associated with each other. Social constructivist approaches are, for instance, rooted in phenomenological approaches and have in addition been associated with hermeneutic and critical approaches (Alvesson and Sköldberg 2018).

My interest lies in exploring the various ways global issues are socially constructed and ascribed meaning in everyday life. Ontologically this research is rooted in mild constructivist and phenomenological approaches, as I do not engage in questions about whether there is a reality outside our human understanding (Alvesson and Sköldberg 2018). From the perspective of the so-called **mild constructivism** it is possible to study the social constructions of phenomena without stating that nothing exists outside of these (Nilsen 1997; Schwandt 1994). An argument for this position is that phenomena may exist outside human knowledge, but what is found interesting to study is how humans make sense of what we experience and come to know as reality in everyday life (Alvesson and Sköldberg 2018; Hartmann-Petersen 2009). I do not challenge the results of natural scientific researchers or the calculations made by the Intergovernmental Panel on Climate Change (IPCC), but I take another, a qualitative, interpretive and contextual, approach to doing research on the issue. The constructivist argument is that there is no one way to understand a phenomenon, because different issues and phenomena are ascribed different meanings in different contexts (Alvesson and Sköldberg 2018). Likewise, phenomena of scientific interest are not "out there" to be discovered, but are socially constructed (Esmark, Laustsen, and Andersen 2005; A. D. Hansen and Sehested 2003). In this thesis I analyse in depth the small stories told about a global issue. The understanding inspired by my constructivist roots is that the telling of stories is an integrated part of human existence (Alvesson and Sköldberg 2018; Bo 2016). Common sense-understandings are considered to be constructed intersubjectively (Alvesson and Sköldberg 2018; Berger and

Luckmann 1989). My focus is on everyday life small stories told by a group of people, but my understanding is that these stories are developed in relation to the physical surroundings as well as other human and non-human actors, as the interaction with and connectedness to non-humans is an essential part of human existence. Ontologically this relates to the break with human exceptionalism. Although I take a constructivist approach, I do not reject the notion that the physical surroundings are part of the development of the small stories (Freudendal-Pedersen 2016b).

The social constructivist and phenomenological traditions have inspired how I understand everyday life as the immediate world in which we human beings make sense of phenomena (Schutz 1971). It is from the intersubjective lifeworld context that the young Copenhageners develop and tell their everyday life small stories. These stories are not always about the "ontological status" of climate change, but of the various kinds of sense-making of the issue (Berger and Luckmann 1989, 20): "The everyday life is taken for granted *as* reality. It does not require additional verification over and beyond its simple presence. It is simply *there*, as self-evident and compelling facticity" (Berger and Luckmann 1989, 23, original italics). Small stories told about climate change are constructions of the issue based on how experiences in the everyday life that appears as reality. These stories mirror common-sense understandings developed in the specific context in which every day is lived (Alvesson and Sköldberg 2018; Berger and Luckmann 1989). Inspired by Peter L. Berger and Thomas Luckmann's (1989) understandings of socialisation and Anthony Giddens' (1984) structuration theory I understand a dialectic and mutual influence between individuals and structures or society. The staging perspective has a relation to the constructivist approach, in that the ways that climate change is staged by institutions, politicians, municipalities as well as friends and colleagues and so on, matter for the ways climate change is constructed in everyday life (Alvesson and Sköldberg 2018; Beck 2009; Jensen 2013; Norgaard 2011). It is by studying these mundane and often overlooked stories that we might learn about the difficulties of encountering and engaging with threatening global issues in everyday life.

Epistemologically the research is rooted in constructivist, phenomenological, critical and interpretive approaches that understand knowledge and meaning as constructed interactively between participants and researcher (Alvesson and Sköldberg 2018; Denzin and Lincoln 2018; Freudendal-Pedersen 2007; Hartmann-Petersen 2009). My interest has been to explore various meanings of climate change, not climate change as an issue in itself (Schutz 1971). Likewise, I consider the empirical materials as constructed from the research design, the questions I have asked and the theoretical perspectives that have inspired the questions, and the empirical materials should thus not be seen as reflections

of a reality (Alvesson and Sköldberg 2018; Freudendal-Pedersen 2007). Consequently, the analytical conclusions are my interpretations of the young Copenhageners small stories, rather than objective presentations of these (Alvesson and Sköldberg 2018; Glesne 2006).

The scope of this research has similarities with what has been called an **extreme case** (Flyvbjerg 2006; Neergaard 2007). Extreme, atypical or deviant cases (they go by many names) are either particularly problematic or good, and are considered to be rich on information, because they are special in some way (Flyvbjerg 2006; Neergaard 2007). On a global scale, Copenhageners can be considered an extreme case to study because of socio-economic circumstances and the level of concern. However, I also find the scope to have similarities with the **typical case** (Neergaard 2007). A typical case is described as the opposite of the extreme case, because it illustrates what is typical for a segment (Neergaard 2007). The interest behind this research is in exploring the stories told by people who have not radically reorganised their lives because of climate change – Copenhageners who live what I have termed average or ordinary lives. We could also call them typical. What may be considered average, ordinary or typical depends on the factors measured. As I argue in the following section, I consider the young Copenhageners typical in the sense that they belong to the majority in regard to age, educational level and affiliation to the educational or labour market. That the scope of the thesis has similarities with both the extreme case and typical case can be explained with Delmar's (2010) argument about situations as both typical and unique. The point is that there is both something particular and typical for the scope of this research. Likewise, I consider the small stories that I explore concurrently typical and particular (Delmar 2010; Saukko 2000).

Doing research with young Copenhageners

According to recent surveys, Danes in general and Copenhageners in particular know about climate change and about the future of climate change (Concito 2020; Rambøll 2019), and in this research I explore how a particular group of Copenhageners talk about climate change. In the following I present the participants and elaborate on the arguments for doing research with young Copenhageners.

Deciding the scope of the research

I decided on two criteria for participation in the research, one concerning demography and one concerning geography. The criteria were that the participants should be in the age group 20-40 years and live in one of two Copenhagen neighbourhoods, either Nørrebro or Nordhavn. With my aim of exploring the ways climate change is storied in an everyday life context, I place the research within qualitative traditions engaged in studying complexities in individual and collective experiences. I substantiate the relatively small number of participants in the research with the qualitative aims of doing in depth-interpretations and thick descriptions of small stories about climatic changes (Geertz 1973; Neergaard 2007). My choice of participant criteria was purposive and in line with the research question and design (Neergaard 2007). Before introducing some characteristics of the participants, I will put forward some of the considerations I had regarding the sampling criteria.

Young Copenhageners: Definitions

As I have stated, the young Copenhageners are interesting from a research perspective for several reasons: The phase of life between being adolescent and adult is transformative in many ways, the young Copenhageners have in common that they live in a particular time and place, this age group makes up a large part of the population in Copenhagen, they are of legal age in society and will in all probability live for many years, playing a part in future norm developments[7] (Gundelach, Hauge, and Nørregård-Nielsen 2012; Illeris et al. 2009; J. C. Nielsen 2019; Nilsen and Brannen 2013). Further, the ambivalent and often paradoxical mentions of these young people make them an interesting group. Young people in the Global North have been both criticised and praised for their role in current and future climate change action (Stanes and Klocker 2016).

My own understanding of why it is interesting to focus the research lens on young Copenhageners has developed through the research process: From a purely generational view on **generation Y** or **millennials**, the generation of people born between the years 1980 and 2000, in the broadest definition, to a view that encompasses generational and phase of life understandings (Halkier 1999; Illeris et al. 2009; Rouse and Ross 2018). I initially decided on an age-related sampling criterion, to recruit participants who were born within this 20-year interval (from the year 1980 to the year 2000).

I find the idea of generation as an umbrella term that encompasses people all over the world born within the same interval of years reductionistic and inadequate. My understanding of generation is inspired by the notion of generation presented by sociologist

[7] According to Statistics Denmark the current life expectancy for people living in Copenhagen is 80,8 years (Statistics Denmark 2021).

Karl Mannheim (1964) and scholars inspired by him (e.g., Murray and Järviluoma 2020). In this understanding, generations are

> "… more than the product of biology but are associated with a location in a continuum where members of a group become associated through shared experiences within a particular socio-political and historical context" (Murray 2016, 5).

It is thus the shared experiences that people born in a specific time and social context, rather than the biological similarities of being born in a particular time, that makes a generation (Mannheim 1964; Murray and Järviluoma 2020). This understanding is different from that of generation as cohort, as it is not only the time of birth that is considered important, but also the shared experiences of a particular social and historical context (Murray and Järviluoma 2020). This view on generations is also less determining than the biologically focused:

> "Members of a generation may come to inhabit the same social space but may acquire different senses of their identity, and sense of belonging that depends on their accumulated experiences or histories of mobilities" (Murray, Sawchuk, and Jirón 2016, 544).

Lesley Murray and Helmi Järviluoma (2020) add a spatial element to the understanding of generations: "Generation is, by our definition, dependent on socio-spatial and historical context" (Murray and Järviluoma 2020, 230). In this sense it is not only the sociocultural, but also the spatial context that is important for the understanding of people belonging to a generation. With this understanding it matters that the participants have shared experiences in that they all live in Copenhagen and were not only born within the same time interval. I prefer the term **young Copenhageners** to **millennials**, as these terms have less reductionist connotations and work with my understanding of the participants in terms of both the phase in their lives and the time and place they are situated in.

As mentioned, the term **young adults** entails the understanding that for young adults, the youth phase in life is expanded, compared to people who were young many years ago. Because of the extended length of this phase, I decided to maintain my initial sampling criterion, Copenhageners born between the years 1980-2000, although I initially decided on this criterion because of my interest in the millennial generation. When I first met them, the participants were 20-39 years of age. The age span of the young Copenhageners is approximately 20 years, and the youngest and oldest participants may not have a sense of belonging to the same generation, if they were asked. The youngest of the Copenhageners lived at her parents' home when I first met her, and the oldest of the participants lived with her family, her partner and two children. The aim of working with participants within such a broad age span is thus not to lump all participants together. It is not my aim to draw conclusions about what could be termed the "nature of millennials". My aim

is rather to explore the climate change stories that are told across the phase of life in which people are moving away from home and have to decide on, among other things, education, work, places of residence, partners and whether to have children, in the specific time and place of contemporary Copenhagen.

Young Copenhageners living in Nørrebro or Nordhavn

The main geographical sampling criterion was residence in Copenhagen. The city's adaptation and mitigation initiatives have generated international recognition. Within the overall geographic criterion of Copenhagen, I recruited participants from two different neighbourhoods, for analytical variety in a search for transversal patterns (Neergaard 2007). The two neighbourhoods are the Rantzausgade neighbourhood in inner Nørrebro and the second is the Århusgade neighbourhood in Nordhavn[8]. The Rantzausgade neighbourhood is the name for one of two project areas in the City of Copenhagen's urban renewal project "Områdefornyelsen Nørrebro" (Områdefornyelsen Nørrebro 2014). The area is named after the main street, Rantzausgade. The Århusgade neighbourhood is located in the southern part of the development area Nordhavn. It is named after the street that connects the neighbourhood with the bordering neighbourhood Østerbro (City of Copenhagen 2018). In the following I use the broader names when I describe the two neighbourhoods, Nørrebro and Nordhavn respectively, although these names are generally used to describe larger neighbourhood areas. When I write Nørrebro and Nordhavn, I am thus referring to the two smaller parts of the larger neighbourhoods.

The two neighbourhoods are interesting, because they are two examples of current urban development in Copenhagen: The transformation of former industrial areas to residential neighbourhoods and the renewal of old residential neighbourhoods. In the last decades, Copenhagen has expanded as new areas have been developed in the city's old industrial areas around the harbour and the like. Simultaneously, many of the city's older residential neighbourhoods have undergone developments to fit contemporary demands for urban life and housing. The aim with choosing the two neighbourhoods has been analytical variation and width rather than analytical comparison (Neergaard 2007).

[8] To clarify for non-Danish readers: 'Gade' is the Danish word for street.

The geographical location of the two neighbourhoods is visualised in the following map:

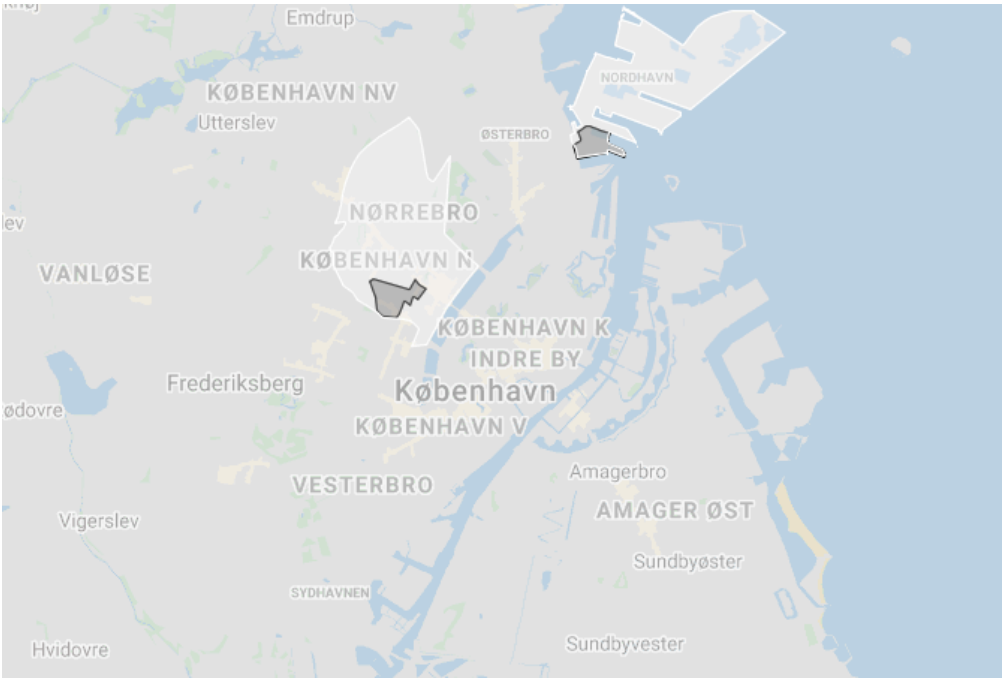


Figure 2: The Rantzausgade neighbourhood and the Århusgade neighbourhood (top right) are the two dark grey figures. The two larger neighbourhoods Nørrebro and Nordhavn are the white figures, Nørrebro to the west and Nordhavn eastward (The map was retrieved from Google Maps in 2021).

The neighbourhoods are similar in the sense that they are both residential neighbourhoods in Copenhagen that are part of the city's strategic planning and development plans, including climate change-related work. The inhabitants are quite young in both neighbourhoods. The average age in Nørrebro is 33,8 years (compared to 36,1 for Copenhagen in general) and 39% of the inhabitants in Nordhavn are between 20 and 39 years (By & Havn 2020)[9]. In addition, they have been developed recently. The Nørrebro neighbourhood was part of the municipal urban renewal project in 2014-2019 (Områdefornyelsen Nørrebro 2014) and the Nordhavn neighbourhood is part of the transformation of a former industrial harbour area into a residential neighbourhood led by the public private partnership, the development company By & Havn[10] (By & Havn 2020). By & Havn is owned by the City of Copenhagen (95%) and the Danish state (5%) and is managed commercially (By & Havn 2020). Both neighbourhoods cover areas just over two square kilometres.

[9] I have not been able to find the average age of the inhabitants in Nordhavn.
[10] The official English name of the development company is CPH City and Port Development. Directly translated into English, the name would be City & Harbour.

Despite some similarities, the variations between the two neighbourhoods are quite tangible. **Nørrebro** is a former working-class neighbourhood with a long history as a residential area since the termination of the demarcation lines around Copenhagen in the mid 1800's enabled the development of residential neighbourhoods outside the former town gates (Federspiel, Jensen, and Wenzel 1997). Today, the larger neighbourhood area Nørrebro is a hip neighbourhood and one of the most diverse and densely populated areas in Copenhagen (Områdefornyelsen Nørrebro 2014). **Nordhavn**, on the contrary, has a short history as a residential neighbourhood. The first residents moved into their new homes in Nordhavn in 2015 (By & Havn 2020). Before that, the area had been an industrial harbour closed off from the public. The different histories of the two neighbourhoods are also visible in the architectural expression and potentials for development. While the Nordhavn neighbourhood has been developed recently, new initiatives have to be fitted into the existing city in Nørrebro. The Nørrebro neighbourhood is located between other neighbourhoods, and the Nordhavn neighbourhood borders the water. I go into detail about the two neighbourhoods in relation to the City of Copenhagen's climate change-related work in chapter 4.

In the analytical chapters I do not make sharp distinguishments between quotes from the participants living in either neighbourhood. I found that the participants spoke similarly about their neighbourhoods, no matter which neighbourhood they lived in. I have emphasised differences when they occurred or when needed for understanding the context. Despite the differences between the two neighbourhoods, participants from both neighbourhood described the neighbourhood they lived in as "a village in the city" or a place with a special sense of community or vibe. As a note, Lykke Leonardsen from the City of Copenhagen confirmed this tendency, that all Copenhageners think that their neighbourhood is something special (Interview A).

Below is an overview of the participants. I have blurred their identities with pseudonyms and placed them in age groups instead of writing their actual ages (Brinkmann 2015). I created the pseudonyms from the chronological order of the individual interviews and used the alphabetical order to search for names on lists of the most popular names in the years 1980-2000, the time interval in which the participants were born.

Overview of the participants

Name	Age group	Neighbourhood
Anne	35-39	Nørrebro
Birgitte	25-29	Nørrebro
Christina	25-29	Nørrebro
Ditte	20-25	Nørrebro
Emma	30-34	Nordhavn
Frederik	30-34	Nørrebro
Gustav	25-29	Nørrebro
Henrik	25-29	Nordhavn
Isabella	30-35	Nørrebro
Jacob	30-35	Nørrebro
Kamilla	25-29	Nørrebro
Lasse	25-29	Nørrebro
Morten	30-35	Nordhavn
Nanna	25-29	Nørrebro
Olivia	25-29	Nordhavn
Peter	25-29	Nordhavn
Rikke	35-39	Nørrebro
Sarah	20-24	Nørrebro
Thomas	25-29	Nørrebro
Ulrikke	35-39	Nørrebro
Victoria	30-35	Had moved away from Nørrebro

In the table on the next page I have listed general characteristics of the group of young Copenhageners to show the width within the group of participants – how they differ in age, gender, parenthood status, occupation and type of housing.

General characteristics of the participants at the time of the individual interviews

Neighbourhood	
Nørrebro	15
Nordhavn	5
Other[11]	1
Gender distribution[12]	
Female	13
Male	8
Other	0
Parenthood status	
No children	12
Have one or more children	8
Expecting	1
Occupation	
Employed	12
Student	4
Self-employed	2
On parental leave	2
Unemployed	1
Housing/flat type	
Housing cooperative[13]	8
Rented flat[14]	7
Rented room in a flat[15]	4
Owner-occupied flat	1
At their parent's home	1

The participants differ in terms of the characteristics listed above, they have different biographical and geographical backgrounds and have lived in Copenhagen for different periods of time. Some have recently moved to the city, others have lived there for several years and some have lived in Copenhagen their entire lives. However, most of the participants have similar educational backgrounds, as they have all graduated from upper secondary school, and all participants except from one were either students at higher

[11] Victoria had moved away from Nørrebro to Nordvest.
[12] I did not ask the participants to tell me their gender. This is my assumption or reading of their gender, based on how they appeared in my eyes.
[13] My translation of the Danish cooperative housing type 'andelsbolig'.
[14] In a shared flat or collective in either council flats or flats owned by a pension fund.
[15] Either privately owned flats or council flats.

education programmes or had completed higher education from institutions such as university college, university or school of architecture. According to municipal key figures, the level of education among inhabitants in Copenhagen is generally high, compared to inhabitants in the rest of Denmark (City of Copenhagen 2020c). According to municipal data, 86,3% of the inhabitants in the age group 25-64 have completed upper secondary school or higher education. The numbers are even higher for Copenhageners between the ages 25-34, where 91,7% have a similar educational background (City of Copenhagen 2020c, 84). The young Copenhageners who participated in this research thus have a relatively high level of education compared to the Danish population in general, but educational backgrounds similar to many other Copenhageners in their age group.

Most of the young Copenhageners were affiliated with the educational system or labour market at the time of the individual interviews. There are naturally Copenhageners who have no association to the labour market, but association to the labour market is generally significantly higher in Copenhagen than the national level (City of Copenhagen 2020c).
The ethnic origin of inhabitants is an often used factor in statistical data in Denmark, especially data concerning the Nørrebro neighbourhood, as it is the most diverse neighbourhood in Copenhagen (Federspiel, Jensen, and Wenzel 1997). I have not included the ethnicity aspect in the analysis, because it did not stand out as essential for the small stories that the participants told about climate change. As these small stories about climate change are the core of this research, I have not engaged in the ethnicity aspect, although the participants who had a non-western background did talk about other issues in the neighbourhood differently than the participants who were of native Danish origin.

Recruiting the participants

As the same group of people were going to participate in the interviews and the focus groups, the recruitment strategy was informed and inspired by recommendations from both interview and focus group literature. The recruitment strategy was analytically selective and included elements of both homogeneity and segmentation, in that the characteristics of the participants differed within the two criteria, as I have presented above (Halkier 2018; Morgan 1997). Besides the geography and age criteria, my recruitment strategy included the criterion that I did not know the participants. Being in the same age group and living in the same city as the participants, there was a risk that I knew the people who would contact me. I had to decline some people, who wished to participate, for this reason.

Finding and recruiting participants progressed in various stages. Initially I made two flyers, one for each neighbourhood, with a short introduction to the research and the criteria

for participating, a simple map of the administrative borders of the neighbourhood, contact information and a data protection notice. The flyers are attached as Appendix A. I used administrative borders from municipal district plans as a guide for selecting the neighbourhood borders on the map on the flyers. These are the same that I have used on the map above. This later turned out to be an uncertainty issue, as some of the participants could not see their street name or part of their street was not on the map. As an example, I cut off part of the street Rantzausgade on the map, because only part of the street was included on the municipal maps of the administratively defined neighbourhood. It made some of the participants uncertain whether they could participate, and other Copenhageners perhaps did not contact me, if they lived on a neighbourhood street that was not on the map. This serves as a learning point about the differences between the administrative subdivisions of neighbourhoods and the lived experiences of the residents. What I thought was a good idea for visual attraction and recognition, turned out to puzzle some participants and possibly exclude others from participating.

I shared printed and digital versions of the flyers in the two neighbourhoods. Initially I placed the printed flyers at local cafés, bars, restaurants, shops and cultural institutions, and handed out the flyers to people I encountered and talked with during walks in the neighbourhoods. On the following page is a photo of the flyer on the door of a greengrocer in the Nørrebro neighbourhood:

Figure 3: The recruitment flyer on the door of a greengrocer in Nørrebro (photo by me).

I shared the digital version of the flyers in local Facebook groups, on my own social media profiles and asked people in my network to share the flyer with their networks. This initial recruitment strategy was based on a wish to get in touch with participants who

were not engaged in local groups or projects. Thus, I did not ask local gatekeepers such as municipal employees and organisation members for help with recruitment.

As this first recruitment strategy didn't help me get in touch with a sufficient number of participants, I made use of broader recruitment strategies in the next phases. I contacted local kindergartens, schools, after school care and youth centres to get in touch with parents, I contacted local gatekeepers such as local public libraries and cultural institutions, sports organisations, homeowners' associations, housing associations, the development company in charge of Nordhavn, By & Havn, I rang doorbells and placed flyers in letter boxes where it was possible[16], I got a notice in the local newspaper in one of the neighbourhoods and got help from an employee at a local housing association, who facilitated the contact to a couple of the participants.

Finally, I asked the participants to recommend someone they knew to participate. This kind of network recruitment is often termed **snowball sampling** or the **snowball effect** (Neergaard 2007). It has been recommended for recruiting participants for qualitative studies such as interviews and focus groups (Stehlik 2004). As pointed out by Daniele Stehlik (2004), the snowball metaphor can be replaced by the term **rhizomatic sampling**. This way of understanding the recruitment of participants through the networks of other participants, allows for broader network recruitment than the linear understanding of the unstoppable rolling snowball. Rhizomes grow and connect to others over time, sometimes breaking and growing connections anew (Deleuze and Guattari 2000; Stehlik 2004). The process of recruiting some of the participants through other participants' social networks resembled the slow-growing rhizome more than the fast-rolling snowball in that one participant would facilitate the contact to one person in their network, most frequently to their partner (Stehlik 2004). As such, six of the participants were in a relationship with one of the other participants. In the case of the double interview, one participant preferred to have their friend participate in the interview as well. None of the participants who knew each other participated in the same focus group, but one of the couples was represented with one person in each of the two focus groups.

15 of the participants lived in Nørrebro and five in Nordhavn[17]. This division with the majority of the participants living in one of the two neighbourhoods, mirrors the difficulties I had recruiting participants in the Nordhavn neighbourhood, despite the diverse

[16] This was challenging as many letter boxes are placed in the stairway of apartment buildings, behind locked street doors. In Nordhavn it was especially difficult to access letter boxes, as many of the newer building in that neighbourhood were fitted with door bells with cameras. When I rang the door bells people in the building could see that I was a person they did not know.

[17] As mentioned, one participant had moved away from Nørrebro.

recruitment methods that I used. I can only make assumptions as to why this is the case. Some of my assumptions are that the inhabitants in Nordhavn were tired of being seen as research entities (a lot of research is done on Nordhavn these years, and I saw several research recruitment flyers in the neighbourhood), that I did not find central gatekeepers in the neighbourhood, key figures or organisations in the neighbourhood, or simply that I did not do enough to get in contact with the inhabitants in that neighbourhood. As the argument for choosing participants from two different neighbourhoods has been for the possibility of analytical variety rather than comparative analysis, I do not find the uneven grouping of participant to be a problem for the research.

The generally high educational level of the participants was not a sampling criterion, but a result of the recruitment process. I figure that the Copenhageners who participated had knowledge about research projects and knew the format and idea of a research interview. Recruiting the participants mostly without the help from key figures in the two neighbourhoods, I did not get help from anyone who could have introduced me to people who might have refrained from participating, because they did not know the format

Doing the interviews

Developing the research design, I included individual interviews inspired by the lifeworld interview to the design, as I wanted to hear the Copenhageners' narrative accounts of their lived experiences (Brinkmann 2018). Both interviews and focus groups are conversation-based methods that allow the participants to talked about their experiences, viewpoints and reflections about the issues at hand. Conversation is often considered the main type of human interaction (Kvale 1996): "Through conversations, we get to know other people, get to learn about their experiences, feelings, and hopes and the world they live in" (Kvale 1996, 5). With my constructivist approach to everyday life experiences, I make use of conversation-based methods based on the understanding that talk and conversations are not only descriptive, but also constructive of the human social worlds (Alvesson and Sköldberg 2018).

The qualitative interview has become one of the most commonly used methods in social sciences (Brinkmann 2018). It is described as a conversation with a purpose and a structure, not between equal partners, but between an interviewer who decides and defines the settings for the conversation and an interviewee who, to only some extent, can decide the topics of the conversation by choosing what to answer (Brinkmann 2018; Kvale 1996). These uneven power dynamics between the interviewer and the interviewee are underlined by the fact that the interpretations of the interview is most often exclusively done by the interviewer (Brinkmann 2018). One way that I dealt with this was in the focus groups, where the participants discussed my preliminary analytical categorization.

I conducted semi-structured interviews based on an interview guide (Brinkmann 2018; Kvale 1996). I have attached the interview guide as Appendix B. The interview guide contained both theoretically informed questions relating to the contextual everyday life and more open-ended exploratory questions (Brinkmann 2018; Kvale 1996). The exploratory questions related to experiences and reflections about **nature** and **climate change**. I wanted to explore the participants' small stories about their understanding of the phenomena and I let the participants talk about what they associated with the phenomena, rather than asking closed questions, encouraging certain answers. The themes of the interview guide related to both experiences with everyday life, the local neighbourhood, nature and climate change. I included the broader themes of everyday life, the local neighbourhood and nature, as I understand everyday life experiences with climate change as situated and contextual. I originally included thematic questions about nature as a sort of **sensitising concept** (Blumer 1954, in Wegener 2014) or transitioning concept to climate change, but I later found **weather** to be much more linked to climate change in the participants' stories. I return to this analytical development in the end of this chapter, when I present the strategy of the analysis.

When possible, the interviews were conducted as combinations of qualitative interviews, **photo elicitation** (Harper 2002; Tinkler 2014) and **walk-alongs** (Kusenbach 2003), to combine the traditional sit-down interview with methods intended to spur other thoughts and other kinds of stories than the verbal qualitative interview. Out of the 20 interviews, 17 interviews included photo elicitation with the participant's photos, and 11 interviews were concluded with a walk-along in the area. Additionally, one interview was conducted as a walking interview in another area of the city, close to the participant's work place, as this was the only possibility for the participant to take part in an interview. I conducted most interviews between August and December 2019 and the last one in September 2020.

Before the interview, I got in touch with the participants over the phone, via email or on Facebook Messenger. This initial contact had three purposes: To check the sampling criteria (age and neighbourhood of residence), to schedule a time and place for the interview and to introduce the photo exercise. I will present the photo exercise in the next section. The two sampling criteria worked as screening questions (Halkier 2018; Morgan 1997) that I asked the participants before I scheduled an interview, making sure that the participant lived in one of the two neighbourhoods and was in the selected age group. Only in the cases where the contact between the participants and myself was facilitated by someone else, it was not possible for me to ask the participants the screening questions

directly, and there was a risk of criteria misunderstandings. Such a misunderstanding happened with Victoria, who, as mentioned, did no longer live in one of the two neighbourhoods as she had moved away. She was a volunteer in an organisation in the Nørrebro neighbourhood and had daily activities in the neighbourhood.

I conducted the interviews as physical meetings, either at a local café in the neighbourhood where the participant lived, in the participant's home, at their workplace or, as mentioned, in one case as a walking interview in central Copenhagen. The interviews lasted between 50 minutes and 1 hour and 35 minutes, and most were about an hour long. As a thanks for their participation, I paid for a beverage at the café or brought a cake to their home. I tried to wear clothes that fit the interview situation, and I often placed my notebook, pen and interview guide on the table. I made use of them during the interview, but they also helped me fit the expected appearance of a researcher.

At the beginning of each interview I asked the participants to sign a consent form to ensure their informed consent (Brinkmann 2015; Kvale 1996). By signing the consent form, the participants accepted that I recorded the individual interviews and focus groups and decided whether I could use their photos (by marking yes/no boxes). On the consent form was information about the research and their options to withdraw their consent at any time. I recorded all interviews and took notes in my notebook to remember certain words that I wanted to ask follow-up questions about. I recorded most interviews using a microphone plugged into my smart phone. I recorded the first interviews with a dictaphone, but I found that a microphone attached to a phone enabled the walk-along to seem more natural, as participants attached the microphone to their clothes and placed my phone in their pocket. This way I did not hold a microphone in front of them, and the flow in the dialogue had better conditions. During the sit-down part of the interview, I placed my phone on the table between us, screen facing down, to avoid distractions. Immediately after the interviews, I scribbled down my impressions, and later I transcribed the interviews.

Traditional qualitative interviews are primarily conversation-based, but the exchange of words is not the only interesting part of an interview. Material or physical surroundings and things are also found to mediate or take part in the conversation (Brinkmann 2018). I found that the participants would often invite me to notice or engage in the surroundings of the interview location, as Pink (2015) has mentioned. Some would talk about the weather on that particular day, some would invite me to hear or feel the wind moving through the urban space we were in, some would point or walk to particular places where we would both look at something that they had talked about in the interview or where they had a particular memory. Sometimes the interview got interrupted by sounds from the street or the café, and the participant would often relate their points to what was

happening around us. Interviews have been called events that are both produced in a place and producing place. This makes the location of the interview and other sensory aspects interesting part of the interviews (Pink 2015). I wanted to conduct the interviews in the local setting of the neighbourhood in which the participants lived at the time. This meant that the interviews would take place in local settings that the participants knew rather than in 'neutral' institutional settings that would be more suited for recording the interview. Locating the interviews in the local neighbourhood, I hoped that the participants would reflect on, refer to and recollect memories, stories and places in the neighbourhood or the city in general. My methodology is not ethnographic, but I am inspired by the sensory aspect that ethnographic scholars like Pink (2015) have advocated. She (2015) writes that sensoriality is "… part of how we understand our past, how we engage with our present and how we imagine our futures" (Pink 2015, 3). To explore other sensory aspects of the interviews, I included visual and moving elements into the interviews. Both elements are common for the everyday life context that the interviews were placed in, as most Copenhageners are used to taking photos, and walking through the city is, for most able-bodied people, an integral part of urban everyday life. I elaborate on the two in the following.

Using photos in the interviews: The photo-elicitation element

Social scientific researchers within anthropology and sociology have made use of photographs in their studies as part of fieldwork, ethnography and interview-based approaches for decades (e.g. Bateson and Mead 1962; Harper 2012; Pink 2012; Rose 2016). In studies about the urban and geographical fields this has varied between for instance working with photos as representation and illustration (e.g. documentary photography of gentrification processes) and photos as evocation (e.g. of subjective experiences of place) (Oldrup and Carstensen 2012; Rose 2008, 2016). Using photos in urban research is considered valuable as photos can convey sensory everyday experiences of urban places and urban space (Oldrup and Carstensen 2012; Rose 2016). Photography-based methods where participants take photos of their surroundings are especially common in studies with children and youth, because of the accessible and non-intrusive advantages of the methods (e.g., Cele 2006; Croghan et al. 2008).

My approach to the role of the photos is that they were mediums or routes to other narrative accounts and not, say, documentary testimonies of places, events or processes. Anthropologist Sarah Pink (2013) writes about the use of participant-produced photos:

> "When participants take photographs for us the images they produce do not hold intrinsic meanings that we as researchers can extract from them. Rather they create routes through which we can explore in interview how people experience and act in the material, social and embodied elements of their environment" (Pink 2013, 99).

Different terms have been used to describe the combinations of qualitative interviews and photographs, such as autodriving (Heisley and Levy 1991), photovoice (Wang 1999), photo elicitation (Harper 2002), photo-documentary (Goopy and Lloyd 2006) and photo-interviewing (Tinkler 2014), each with their own history and implications. Photovoice, for instance, is concerned with empowerment of the participants, while photo elicitation is focused on producing (different kinds of) knowledge (Harper 2012). I utilise the term photo elicitation for how I have worked with the participants' photos. The term is often credited to anthropologist John Collier in the 1950's and was more recently reintroduced in social sciences by sociologist Douglas Harper (Harper 2002, 2012; Pink 2015). Describing the method Harper writes:

> "Photo elicitation is based on the simple idea of inserting a photograph into a research interview. The difference between interviews using images and text, and interviews using words alone lies in the ways we respond to these two forms of symbolic representation […] These may be some of the reasons the photo elicitation interview seems like not simply an interview process that elicits more information, but rather one that evokes a different kind of information" (Harper 2002, 13).

The photos are used as props that might evoke different aspects than the verbal questions known from the traditional interview. The idea behind photo elicitation is collaboration between the participant and the researcher (Harper 2012). By talking about photos, the focus of the interview moves from the words of the interviewee to the photos and the meaning evoked from them. Harper (2002) argues that photos can have a bridging effect between the researcher and the participant, as photos may help generate a better understanding of what the participant is talking about when both look at the photo. It is my understanding that I can never be sure that I understand what the participant meant or experienced when the photo was taken. But hearing the participants talk about the photos while looking at them together at least serves as a common point of reference. The participants' photos worked as a starting point for the participants' stories about specific events, practices and localities as well as for abstract ideas, thoughts, memories and sensory experiences (Pink 2013; Rose 2016).

My interest in the photos has been to explore what the Copenhageners found meaningful to mention about them in the interviews. The participants would often relate their photos to something they had already said or mention one of their photos when making a point. This underlines the idea that knowledge and meaning are constructed or produced in the interviews and that it is not simply about eliciting contained or static knowledge. Visual

methods do not give access to everyday life experiences in themselves, but they can add different perspectives to a study, depending on the use and theoretical inspirations of that study (Oldrup and Carstensen 2012). With my theoretical and methodological starting point in everyday life stories, I made use of the photos to explore further perspectives of the narrative accounts of contextual experiences. As such, applying this approach, I have not engaged in relations between the young Copenhageners and the technologies enabling them to take the photos, the affordances of the smart phone technologies and the practices of taking photos, as for instance actor-network theory inspired approaches would do (Larsen 2008; Latour 2005).

Introducing the photo exercise

At the initial contact before the interview, I asked the participants to take some photos and send them to me before the interview. I did not meet with the participants for this, although an initial introductory meeting is often arranged (Tinkler 2014). Instead, I gave the instructions on the phone or via email or online messaging. I had listed the photo exercise on the recruitment flyer, so most of the participants were aware of the task, and I assumed that the task would be fairly easy for the young Copenhageners.

I asked all of the participants to take four to five photos and send them to me. My strategy for the introduction to the exercise was somewhat open and somewhat constrained (Tinkler 2014). The photos had to be in their neighbourhood – something about the climate or nature that they noticed, that stood out or mattered to them. I wanted them to focus on climate or nature, but at the same time I did not want the exercise to be too scripted. This rather blurry instruction caused difficulties and confusion for some of the participants. I elaborate on this below.

I asked the participants to send the photos to me no later than the day before the interview. I brought the photos to the interview, preferably in printed form (in colours), but when this was not possible because of timing, we looked at the photos on a smart phone. 17 of the participants took and sent photos before the interview. The remaining four participants said that they did not have the time to take photos before the interviews. Previous studies using photo elicitation have provided participants with disposable or digital cameras (e.g. Croghan et al. 2008; McIntyre 2003; Oldrup and Carstensen 2012; Tinkler 2014). However, the technological development of camera phones and smartphones has made it possible for participants in a study like this to take photos without borrowing a camera from the researcher (Larsen 2008). Visual and digital technologies have become a highly integrated part of everyday life for many people, at least among young people in the Global North (Harper 2012; Larsen 2008; Larsen and Sandbye 2013;

Pink 2015). This presence of photos in everyday life makes photographs an easily accessible method to use in research concerning everyday life, because most people carry their phone with them at most times (Larsen 2008; Oldrup and Carstensen 2012). Because of the development of camera phones and smart phones, photos have become accessible, instant and mobile. Photo and video-based social networks such as Instagram and Snapchat have become an integral part of everyday life interaction, and visual representation is widespread in daily life (Larsen and Sandbye 2013). Whereas the old-fashioned photo album was traditionally based in the home, both the camera and the photo album are now integrated in the smart phone which is usually brought along on the move, making it fast and easy to take and share photos wherever and whenever needed (Larsen and Sandbye 2013). All 17 young Copenhageners who took photos sent me photos from their smartphones. They did not express uncertainties about the practicalities of the exercise or ask how to take the photos.

Reflections on the photo elicitation element

I chose to work with photos taken by the participants, because I was interested to see and hear about the participants' perspectives. Some researchers (often those who are also skilled photographers) have carried out photo elicitation with photos they have taken themselves (Harper 2012). This approach is considered beneficial when the interest is in capturing photos of high photo-technical value, or if the researcher wants to take photos with the participants in them (Harper 2012). As I have been more interested in what the participants wanted to tell me with the photos, I asked the participants to take the photos. According to sociologist and historian Penny Tinkler, participants are often interested in talking about photos they themselves have taken (Tinkler 2014). The familiar and the mundane can be difficult to talk about as something distinctive, since it is something that is experienced every day or on a regular basis, but photos are said to evoke thoughts and stories about everyday life phenomena, since the memories and meanings that people attach to places, things or situations can be articulated through looking at a photo (Pink 2012; Tinkler 2014). The semi-structured interview format left time to follow the various threads of thoughts that the participants talked about when they talked about the photos.

Today, photographs are acknowledged as more than copies of an "observable reality" (Tinkler 2014, 5). Instead, they are considered to be constructed, subjective, partial and closely related to the photographer's physical and social position and choice of perspective (Croghan et al. 2008; Harper 2012; Larsen 2004). What is captured in a photo is a glimpse of time, and the photo does not show what has happened before or after the photo was taken (Larsen 2004; Rose 2016). In line with the social constructivist inspirations, I understand that the photos are not objective representations of the two neighbourhoods, but constructed from, among other aspects, the instructions I gave, the equipment and the time the participants had to take the photos (Croghan et al. 2008).

As I used the photos as part of the photo elicitation element in the interviews, I did not have to guess or interpret the scene or meaning with each photo. The scenes in the photos were made meaningful by the participant who had taken the photo, when they told me about what was in the photo, why they had taken it, and how they experienced the place or scene that they had photographed. This is how the photo had a bridging effect between the participant and me, the researcher (Harper 2012).

I asked the young Copenhageners to take photos in their neighbourhood. The neighbourhood can be understood as the immediate surroundings in which we make sense of the world, between the home and the rest of the world. My intention was to explore how their stories and their places of residence interacted. In this sense I understand the neighbourhood as more than a geographical location. This is in line with the understanding of place as a way of understanding the world (Cresswell 2015): "When we look at the world as a world of places, we see different things. We see attachments and connections between people and place. We see worlds of meaning and experience" (Cresswell 2015, 18). Using participant-produced photos was a way to hear about the participants' experiences and meanings that they attached to their local surroundings. I found that the participants more often talked about emotional and memories from the neighbourhood when they talked about the photos or when we walked around the neighbourhood, than when I asked questions verbally during the sit-down part of the interview. I understand that everyday life sense making-processes are place-based and entangled with past and present experiences as well as anticipations of the future (Clandinin and Connelly 2000; Pink 2012). Using photos evoked some of these aspects in the interviews.

Doing the photo exercise before the interview may have played a role for the participants, as being asked to focus on a place through the lens of a camera (or in this case the camera of a smartphone), is said to make people look at something else than they usually do. Tinkler writes: "The process of deciding what to photograph is also valued for prompting participants to concentrate their thoughts and feelings on a subject" (Tinkler 2014, 8). I asked the participants how it was to get the photo exercise. Several of the participants confirmed what I assumed, namely that they were used to taking photos and that the photo exercise would be easy and somewhat natural to them. Reflecting on the architecture in Nordhavn, Morten said about taking photos in the neighbourhood:

> "Well you actually do that quite a lot, when you live there […] I think that all inhabitants in Nordhavn have a couple of thousand photos that they have taken. And I haven't really hit one of the really good days, I mean some of the sunrises and sunsets, for instance, from the station, where some of my photos are taken. They are wild!" (Morten).

Likewise, Christina said that she regularly takes photos in her local area (Christina). Other participants said that the photo exercise made them look at their local surroundings anew.

As I mentioned above, my instructions to the exercise caused some of the participants confusion while others expressed feeling limited because of the instructions. Some participants mentioned that there were things they wanted to photograph, but did not, because it did not relate to the instructions, for instance climate (Lasse; Rikke), nature (Lasse; Nanna) or the borders of the neighbourhood (Olivia; Thomas). The confusion about the neighbourhood borders shows that ideas about place are diverse, subjective and sometimes conflicting. The instructions might have been clearer, had I made them either looser or more scripted. I could have done so by either not telling them where to take the photos or outline the borders of the neighbourhood, or by not using the vague **sensitising concepts** (Blumer 1954, in Wegener 2014) **climate change** and **nature** or by giving them a script for what they should photograph. Despite the confusions and limitations expressed by some participants, the photos did work to evoke other aspects in the interviews.

Ideally all the participants would have taken photos that they had considered in equal detail, but one of the conditions of doing research with people in their daily lives is that I, the researcher, enter in the midst of their daily doings in their sometimes busy lives. Several of the participants mentioned that they did not have a lot of time to take the photos and that they could have taken more, had they had the time (Kamilla; Nanna; Olivia; Rikke). Others said that they had forgotten the photo exercise and only had time to take photos of places that were close to their home (Anne; Ditte; Emma). Nanna said that she was challenged by the time of year, as she had to rush to take the photos after work, before the sun set. Several participants sent me photos from the camera roll on their smart phones, often mixed with new photos that they had taken for the photo exercise. Some because they did not have the time to take new photos and some because they found photos on the cameral roll of their phones that suited the purpose.
Referring to my formulation of the exercise, Frederik said that he chose some photos from his camera roll that he had initially taken because he had found something weird or interesting. As I do not use the photos as documentation to assess certain places at certain times of the day or year, I consider it an inevitable condition rather than a problem, that the participants sent me the photos that it was possible for them to send.

In general, the participants did not express uneasiness about doing the photo exercise[18]. One participant, however, did say that he had avoided taking a photo that he wanted to take, because he did not feel safe doing it. Gustav had presented two photos representing what he liked about the neighbourhood and what he did not like. He explained that he wanted to take a photo of a large group of people gathered in front of the kiosk, because it represented what he did not like. He said that he did not take it, because he feared that they would get angry and that he did not dare to take a photo as he felt unsafe.

By asking the participants to take photos, they decided on the motives, places and moments from their neighbourhood, that they wanted to share. I asked the participants to take photos in their neighbourhood, that made them wonder or think about climate change, but besides from that initial exercise instruction, the participants could take photos of what they found important or interesting. Most often, the participants took photos related to the exercise, but some participants took photos of other things in the neighbourhood, that they wanted to talk about. When including participant-produced photos in the research design, the participants can also introduce themes or perspectives that they find important and sometimes challenge the interview agenda (Tinkler 2014). I experienced this in one of the interviews. Jacob had taken the photos some time before he knew about my research. He told me that he had sent me photos of problematic issues, the oblique approach to the Nørrebro neighbourhood, because he thought that most of the other participants would send me "the idealisation" of the neighbourhood. He talked about the interview as an opportunity to share photos that he had taken as a documentation of criminal or behavioural issues in the neighbourhood, such as a broken moped, left waste and a wrecked lock from a door in his basement. These were photos that he was not yet sure what to do with, but could possibly be used to initiate a debate in the neighbourhood (Jacob).

I have only inserted some of the participants' photos in the text in chapter 6. The photos that I have inserted were photos that the participants talked about in relation to their experiences with climate change. I have chosen not to include all of the participants' photos, as many of them did not fit into the analytical categorisation.

Using movement in the interviews: The walk-along element

When possible, the interviews ended with a walk around the neighbourhood, on a route decided by the participant. In total, 11 of the 20 interviews ended with a so-called walk-along (Kusenbach 2003). As a research method walking is easily accessible as it requires

[18] I do not know whether some of the four participants who did not send me photos, refrained from doing so, because they did not feel comfortable doing it.

no special equipment or too much preparation, at least for the able-bodied researcher and participant. I included walking to the research design to add an additional sensory and moving aspect to my research, to explore the kind of stories evoked when moving in place, in other words "being there" with the participants (Murray 2016). Sociologist Margarethe Kusenbach (2003) introduced the **go-along** as a hybrid between interviewing and participant observation, an in situ method with potentials to explore the meanings of place in everyday life. Building on the strengths of interviews and observation, the go-along method is suited for exploration of the role of place in everyday life experiences (Kusenbach 2003). I chose to do the go-alongs as **walk-alongs**, walking with the research participant in their neighbourhood (Kusenbach 2003). A similar method is "walking with", known from mobilities research (Büscher, Urry, and Witchger 2011). Kusenbach conducted 'natural' walk-along, accompanying participants on their routinely everyday routes, in order to secure authenticity when observing the participants' spatial engagement in their local surroundings (Kusenbach 2003). Examples of "natural" walk-alongs are to the participants routine chores such as grocery shopping and dog walking (Degen and Rose 2012; Kusenbach 2003). The walk-alongs I did with the young Copenhageners were more "contrived", as we walked in prolongation of the interview, what you might call an unnatural situation (Kusenbach 2003). My aim with doing the walk-along was, as with the photo elicitation, to explore whether the more sensory method would evoke other stories than the interview. My interest was therefore not so much to study how the participant engaged with their local neighbourhood, as it would be for the researcher conducting ethnographic observation (Kusenbach 2003).

Walking with the participant proved a different kind of engagement with the physical surroundings than the interview, as the participant and I moved through the same space at the same pace, while looking at the same things (Büscher, Urry, and Witchger 2011; Lee and Ingold 2006; Murray and Järviluoma 2020; Pink 2015). This allowed me to hear them talk about sensory aspects of their experiences and their stories about the places we passed on the way and share the bodily experiences of moving through the neighbourhood as the participant (Lee and Ingold 2006; Pink 2015). Sharing the experience of walking through the same space as the participant does not mean to have the same experience as the participant, as these are subjective and formed by past experiences (Lee and Ingold 2006; Pink 2015). Asking the participants questions while walking with them allowed me to hear their articulations of their associations, memories and experiences.

Doing the walk-alongs

Before the interviews, I informed the participants about my wish to end the interviews with a walk in the neighbourhood. I had written it on the flyer (attached as Appendix A) and in the emails and messages that I sent the participants before the interviews. At the beginning of each interview, I reintroduced this wish and matched expectations with the

participant. Sometimes the transition from interview to walk happened with ease, because the conversation was coming to an end. For instance, when the participants would return to answers they had given before. Other times, the transition was almost awkward. The last part of the interview guide concerned climate change, and sometimes the participants talked about their anticipations for the future in a dystopic sense, at this last part of the interview. In these incidents, I articulated the somewhat abrupt and possibly inappropriate transition to the walk-along, in order to reduce the awkwardness.

I asked the participants to lead the way on the walk around the neighbourhood. During the walk around the neighbourhood, the dialogue between us would often change. Whereas the sit-down part of the interview was primarily questions I asked and answers the participant provided, the walk-along took the form of a dialogue. This part of the interview was not structured by the interview guide, but was more spontaneous in regard to the topic of the talk. The participant and I would exchange experiences and some of the participants asked me questions about my research, where I live and why I am interested in the topic and so on, during the walk. I experienced what others have described as advantages of walking with a participant, an "in situ" or "mobile method", that the participants talked more in detail about something they had talked about in the interview, talked about a more personal matter than they did in the interview and reacted to and talked about the surroundings and what they thought of when walking past something (Büscher, Urry, and Witchger 2011; Degen and Rose 2012; Kusenbach 2003). The informality of walking side by side other other kinds of stories, possibly because the participant and I did not face each other, but the same direction (Lee and Ingold 2006).

As mentioned, it was only after 11 of the interviews that the participant and I took a walk in immediate continuation of the sit-down part of the interview. When interviewing people in their (often busy) everyday life, one sometimes has to make pragmatic methodological choices. In this case, it was not always possible for the participants to do the concluding walk around the neighbourhood. Some of the participants had places to be, some had to go back to work and others had to prepare dinner shortly after the interview (e.g., Anne; Henrik; Kamilla; Nanna; Morten; Olivia; Peter). In acknowledgement of entering "in the midst" of the participants' life (Clandinin 2016), I conducted the interviews, even if it was not always possible for the participant to end the interview with the walk-along.

The visual and moving elements of the interviews evoked other aspects in the than the traditional sit-down part of the interviews and added a sensory and bodily aspect to the research design. In the following, I present reflections about the two focus groups.

Conducting the focus groups

In order to study how the young Copenhageners talked about the issues of climate change in an interactive setting, I conducted two focus groups with the young Copenhageners that participated in the interviews. Focus groups are generally considered advantageous in studies about experiences, interpretations, interactions and norms within a group (Halkier 2018; Morgan 1997; Morgan and Krueger 1993). I added the focus groups to the research design to enhance the validity of my preliminary analyses and possibly get new perspectives for my understanding of the research question through encouraging the participants to discuss when different interpretations or ideas occurred in the dialogue (Halkier 2018; Morgan 1997). Conducting the focus groups in continuation of the individual interviews made it possible for the participants to exchange thoughts and discuss themes and questions of my choosing. As such, the individual interviews and the focus groups are complementary (Freudendal-Pedersen 2016b). The individual interviews are prerequisites for the focus groups, as I used the themes and preliminary analytical categories **experiences** and **responses** that I developed on the basis of the interviews to form the focus group questions and exercises. Similarly, both new aspects of the themes and different interpretations of the themes came up in the focus groups, when the participants exchanged thoughts and commented on each other's statements. In this sense, neither the interviews nor the focus groups could replace the other, as both methods generated specific analytical themes and aspects (Peek and Fothergill 2009).

The different purposes of the two methods were echoed in the questions and exercises that I had planned. The individual interviews were more broad and exploratory with different themes relating to their everyday life in the city. The themes in the subsequent focus groups were focused on the preliminary analytical categories concerning climate change, because I wanted these discussions to be more focused on their thoughts and experiences on this particular issue (Morgan 1997).

As the participants were people that I had already had conducted interviews with, I did not have to develop a new recruitment strategy. The flyer that I initially used to recruit participants described my wish for them to participate in an individual interview and a focus group, if possible[19] (see Appendix A). Additionally, at the end of each interview, I asked the participant whether I could contact them regarding participation in a focus group. All the participants allowed me to contact them again. I did so in September 2020, to invite them to participate in a focus group. I invited all the young Copenhageners to participate in a focus group. Over-recruitment, inviting more people than needed, has been recommended in focus groups, to ensure that the required number of participants

[19] I used the generic term workshop on the flyer, as I had not decided on the format when I made the flyers, before the individual interviews.

is achieved (Morgan 1995). I had set the date and although it had been almost a year for some and more than a year for others since we met at the interviews, most of the participants expressed interest in participating. Five accepted the invitation right away, most replied that they were not able to participate on that date and a few did not reply. I decided to go through with the first focus group on the planned date, a Tuesday late afternoon at the end of September 2020.

In total, eight of the young Copenhageners participated in a focus group – five persons in the first focus group and three persons in the second. In the first focus group the participants were Anne, Ditte, Isabella, Jacob and Thomas and in the second focus group Birgitte, Nanna and Sarah participated. Within this group of people, it was a bit more unplanned who participated in the focus groups, as it depended on their calendars and their willingness to participate in another activity for my research. It turned out that all the focus group participants lived in the Nørrebro neighbourhood[20]. It would have heightened the validity of the research, if some of the young Copenhageners living in the Nordhavn neighbourhood had participated, but this was not possible. As written above, I have not included the two neighbourhoods to make a comparative analysis of the two, but rather to broaden the scope to an existing, older neighbourhood and a newly built neighbourhood. There were not that many differences in the interview answers given by the participants living in the different neighbourhoods, and therefore I do not consider the participants' neighbourhood of residence to be crucial for the discussions in the focus groups, although I would have preferred to have had someone from both neighbourhoods participating in the focus groups as well.

COVID-19-related adjustments: Moving the focus groups online

I initially planned the focus groups to be conducted physically where the participants and I would be in the same room. I had considered the location carefully to make sure it was accessible, semi-private, quiet and big enough to do the exercises with suitable distance (Halkier 2018; Morgan 1997; Peek and Fothergill 2009), but ended up deciding to move the focus groups online, due to the COVID-19 pandemic. Around this time, the coronavirus was spreading in Denmark again, and from the beginning of September restrictions had been imposed on night life and restaurants in the greater Copenhagen area (The Danish Ministry of Health 2020). At a press conference only a few days before the date of the first focus group, Danish Prime Minister Mette Frederiksen presented additional restrictions to be implemented at noon the next day. Although the government did not

[20] Two of the focus group participants had actually moved since the individual interviews; one to another neighbourhood in the city and one to another part of the country. I consider this a condition when working with people over the span of more than a year, as many changes occur in this phase of life. Likewise, two of the participants who could not attend the focus groups had become parents since the individual interviews.

indicate a specific maximum number of people for social gatherings, the recommendation was clear: to limit social interaction (The Prime Minister's Office 2020).

I did not want to risk participant cancelations because of the new recommendations. Five participants had agreed to participate in the first focus group, and for the purpose of this study, a small size of five participants was fine. I hoped that the small number of participants would make the participants feel comfortable enough to discuss the questions in depth and express possible opposing viewpoints, as has been expressed by others regarding small focus groups (Halkier 2018; Morgan 1997; Peek and Fothergill 2009). The risk of a lower number of participants is, however, that cancellations can be critical for the group dynamics (Halkier 2018). In September 2020, many people had, due to the COVID-19 pandemic, become accustomed to participating in meetings, lectures or social gatherings online. The participants are young and affiliated with the educational system or labour market in various ways, and I thought them tech savvy enough to participate in an online focus group and to have the necessary equipment, in most cases a computer with a camera or a tablet and an internet connection.

After the first online focus group, I invited the participants who were not able to attend on the date in September to participate in the second focus group in October 2020.

Conducting the online focus groups

My aim was to transfer as much of the planned face-to-face format to the online format, and I decided to conduct a synchronous focus group, where the participants and I logged onto an online platform at the same time (Abrams and Gaiser 2017). I used Miro, an online whiteboard platform designed for team members to collaborate online (Miro 2020), as the whiteboard function allows more interaction than other online meeting platforms that I knew of. Choosing a platform that was not that common in Denmark, I prioritised the interactive possibilities over the participants' familiarity with the platform. To make up for this, I included extra time in the programme for technical issues.

A couple of days before the focus groups, I sent the participants a link to the online site and instructions on how to register on the site. I encouraged them to log onto the site 10-15 minutes before the starting time, to prevent too much time being lost to such issues. Despite these preparations, we experienced some starting trouble in the first focus group, and I did not know all of the features on the platform well enough to help the participants quickly. This shows how important it is that the moderator in an online focus group has both moderator skills and technical knowledge (Abrams and Gaiser 2017).

The focus groups each lasted two hours including a presentation round, an introduction, a break and debriefing. In between was an introduction exercise and two thematic discussion exercises (Abrams and Gaiser 2017; Hartmann-Petersen 2009).

I moderated both of the focus groups, and at the first focus group a colleague of mine participated as co-moderator (Halkier 2018). I asked the questions, introduced the exercises and took notes on what was said, and she took notes on the interaction between the participants, kept an eye on the time and picked up on sounds, raised hands and movements that the participants made. I used the same moderator guide for both focus groups (see Appendix C), but made small adjustments in the second focus group. Because fewer people participated in the second focus group, and because I was more familiar with the format, I decided to facilitate the second focus group alone.

At the beginning of both focus groups, I introduced myself (and my colleague in the first focus group), the aim and program of the focus group and presented a status of the research. This status was important, because of my exploratory approach and the developments in the research focus (Brinkmann 2015). I reintroduced the consent form that they had all signed at the individual interviews and reminded them about their right to withdraw their consent if needed. I informed them that I would videorecord the session and drew up some guiding principles for the focus group (Brinkmann 2015). I stressed the importance of the interaction between them and that I hoped they would discuss with each other, instead of answering my questions one after the other.

As a researcher I have ethical responsibilities regarding trust and anonymity (Brinkmann 2015), but the participants did not have the same formal obligations, and I encouraged them all to treat what was said in the focus group with confidentiality. How the participants experience and respond to climate change might not be a private issue that could feel dangerous to share, but since the participants all lived in Nørrebro, they could possibly meet each other around the neighbourhood or know some of the same people.

We did a presentation round so the participants could get to know each other, as they did not know each other. Additionally, all participants got the chance to say something not too far into the focus group.

The focus groups were structured around interactive exercises to make it easier to talk about the issue, encourage interaction and to prevent the participants losing attention to the dialogue during the focus group (Colucci 2007; Halkier 2018).

The introductory exercise was a word association task in two parts (Colucci 2007). The first part of the task was to individually write down three words that the participants associated with climate change in their daily life. The second part was to discuss which of the words they recognised, which words stood out, when they looked at the lists. In the first focus group I asked the participants to sort the words. They hesitated to move the notes, and I later learned that sorting tasks are difficult in online focus groups (Abrams and Gaiser 2017). I adjusted this before the second focus group so the participants would not have to sort the words. The introduction exercise worked to get the participants engaged in discussion. Especially in the second focus group, the participants were quick to interact with each other.

The following photos are screenshots of the introductory exercise from both focus groups. The interface of the online platform resembles paper notes[21]. This is an example of how I tried to transfer as much from the physical format online as possible.

Figure 4: Screenshot of the introduction exercise from the first focus group, written in Danish. (Screenshot of the Miro board from September 2020).

[21] Some participants accidentally drew arrows on the board during the exercise.
The words are in Danish, and I have hidden the participants' names on the screenshots.

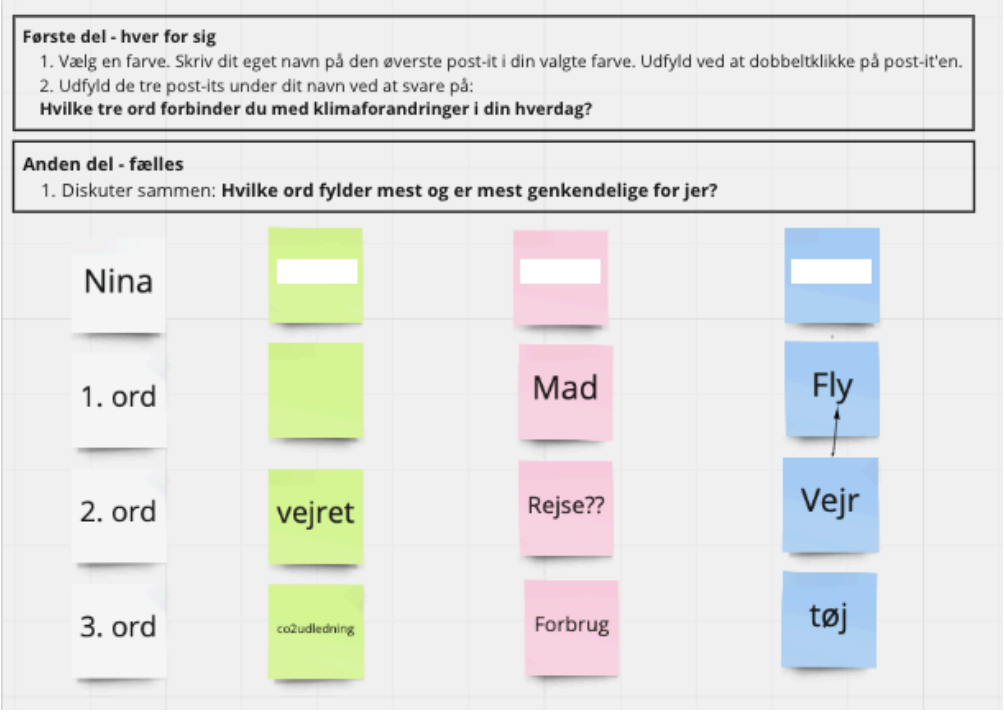


Figure 5: Screenshot of the introduction exercise from the second focus group, written in Danish. (Screen-shot of the Miro board from October 2020).

Following the introductory exercise, I had planned two thematic exercises based on the preliminary analytical categorisation of experiences with and responses to climate change (Hartmann-Petersen 2009). In the first thematic discussion, I asked the participants to discuss their experiences with climate change, based on a collage of photos of things, that they had mentioned in the interviews. In the second thematic discussion, the participants discussed responses to climate change, by talking about a number of statements, that I had written. The moderator guide includes the introduction to these discussions (see Appendix C). I did not adjust the thematic discussions between the two focus groups.

As I understand the analysis as my interpretations from "somewhere in particular", the analytical interpretations of the participants' narrative accounts are not neutral (D. Haraway 1988; Rose 1997). From this perspective, this validation is particularly important for the research, as the participants discussed preliminary themes. I wanted the focus group participants to discuss whether the preliminary analytical categories resonated with

them, to pursue an internal validation of the credibility of my preliminary analytical categories (Tanggaard and Brinkmann 2015).
With epistemological roots in the constructivist tradition, I understand focus groups to be particularly relevant for this type of research, as the participants in the focus group talked and discussed with each other. In a constructivist approach it is assumed that people's narratives are always formed and developed in dialogue with others (Halkier 2018). As others have pointed out, some people prefer to hear the viewpoints of others, before expressing their own opinion or answer to a question (Peek and Fothergill 2009). The focus group format makes it possible for some of the participants to spend some time listening and reflecting before speaking up or to continue on something that another person talked about or recalled (Peek and Fothergill 2009). As the moderator I sometimes struggled with the moments of silence after I had asked a question. The silence sometimes felt awkward and deafening, and I had to make an effort not to break the silence with another question, but stay in the silence longer than I felt comfortable with. Most of the times, the silence was interrupted by one of the participants after a little while and sometimes I had to encourage the participants to speak up with a follow up-question or encouraging phrases.

I had met all of the participants at the individual interviews some time before the focus groups. The participants did not know each other, but I did my best to create a casual atmosphere by referring to our meetings at the individual interviews. That the participants and I had all met seemed to play a role in the focus groups, and it possibly played a bigger part since the focus groups were conducted online and the interaction was challenged by the format.

Learning points from the focus groups

Conducting this research has sometimes proven a process of learning by doing, not least when using methods or formats that I had not worked with before, and I made adjustments in the second focus group, based on challenges in the first. The flow of dialogue in the second focus group was more dynamic, and the discussions seemed more natural than in the first focus group. Three differences between the two focus groups may have influenced this. The first was that I encouraged everyone to turn on their cameras during the entire focus group. In the first focus group, I had let that be up to the participants, in an attempt to make it comfortable for them. Only two out of the five participants had their cameras turned on for the entire session, one turned on the camera occasionally, and two participants did not. This seemed to be an obstruction for the flow in the group dynamic. Observing the atmosphere and body language of the participants proved difficult online, as I was only able to observe the facial expressions of those of the participants who had their cameras turned on. That all participants had their cameras on in the second

focus group is one interpretation of the better flow. The platform did, though, only allow three faces shown at the same time, making it impossible to see everyone at once.

A second difference has to do with my moderator skills. The flow of the focus group have much to do with the moderator, and being more familiar with both the format and the platform, my skills had improved from the first to the second focus group, and I was able to be more casual than I was in the first focus group (Halkier 2018).

A third difference was the number of participants. Others have argued that smaller groups give the participants more time to elaborate and express disagreement than in larger groups (Peek and Fothergill 2009). The discussions in the second focus group were more fluid than in the first, and the participants in the second focus group related their statements more to what someone else had said, compared to the first focus group. This could have something to do with the number of the participants in the online focus groups. Not being able to see each other's body language and gestures, I assume that the participants were more hesitant to speak than they would have been, if the focus group had been held in a physical setting. Based on my experiences, a smaller number of participants might be preferable when doing online focus groups.

Despite the unforeseen practical challenges of conducting the focus groups, doing the focus groups online turned out fine and it enabled the participants to take part despite the practical challenges they would otherwise have had with transportation or child care.

Document analysis and the expert interview

In order to analytically frame the urban context of the interpretations of the young Copenhageners' small stories, I have analysed municipal documents and conducted a supplementary elite or expert interview (Kvale 1996; Lynggaard 2015). These empirical materials are primarily utilised in chapter 4 which sets the analytical framing.

The documents that I analyse in chapter 4 are publicly accessible municipal documents. These helped me to trace the City of Copenhagen's approach to and work with climate change over an extended period of time (Lynggaard 2015). I selected municipal documents that included climate change-related policies or projects as well as documents that were mentioned in or related to documents I was analysing, a process somewhat similar to the rhizomatic recruitment of participants through other participants' networks

(Stehlik 2004). I have used the documents to trace the development in the city of Copenhagen's work with climate change in relation to urban development and to study how climate change is narrated in the municipal documents.

As a supplement to the municipal strategies and plans, I conducted an interview with Lykke Leonardsen, program leader of Resilient and Sustainable City Solutions at the City of Copenhagen's Technical Administration. In the elite or expert interview, the interviewee is chosen for their knowledge within a field, and the interviewee will often be used to presenting their work and be familiar with the interview format (Kvale and Brinkmann 2009). This was the case with this interview, and I made sure to be sufficiently prepared by reading municipal documents related to climate change and learning about the chronological order of the development of climate change-related projects and initiatives. I based the interview guide on these insights and on my preliminary analytical work, based on the individual interviews with the young Copenhageners. I have attached the interview guide as Appendix D.

This interview supplements the municipal documents, because I was able to ask Lykke Leonardsen about details and ideas that led to the development of the strategies and plans. In this sense, the interview augments the municipal documents, as a verbalisation of the processes and ideas behind the strategies and plans. Additionally, I asked questions related to the dialectic processes between the small stories and grand narratives. I asked Lykke Leonardsen to comment on some of my preliminary analytical ideas and themes from the interviews. The main emphasis of the thesis is on the small stories told by the young Copenhageners. Therefore, I have not included other elite or expert interviews from the urban planning context. If I am to continue working with the dialectics between the small stories and grand narratives, I will explore the perspectives of more planners, to study how the small stories might inform future urban planning.

The expert interview and municipal documents form the empirical basis of chapter 4. In the following, I present reflections about the quality of the research.

Considering qualitative research

Feminist thinkers like Donna Haraway (1988) and Gillian Rose (1997) have argued that knowledge is situated and that universal applicability is not possible, as research is always partial, specific and produced somewhere in particular (D. Haraway 1988; Rose 1997). Other qualitative researchers have advocated that the criteria for qualitative research must be different from those developed for quantitative research, as the aims of the two traditions are different (Elliott, Fischer, and Rennie 1999; Tanggaard and Brinkmann 2015).

The measures of reliability, validity and generalisability do not serve so well in the evaluation of qualitative studies, as these were developed in line with the aims and purposes of the quantitative tradition (Elliott, Fischer, and Rennie 1999; Tanggaard and Brinkmann 2015). **Transparency** and **recognisability** have been presented as alternative criteria for evaluating the quality in qualitative research (Tanggaard and Brinkmann 2015).

Transparency has to do with making the methodological choices visible as accurately as possible and show how these choices are grounded in the literature of the methodological landscape (Coffey and Atkinson 1996; Olsen 2003; Tanggaard and Brinkmann 2015). A strategy for pursuing transparency in the work is to apply a reflexivity that is both focused inward on the researcher and outward on the implications of the research (Alvesson and Sköldberg 2018; Lincoln, Lynham, and Guba 2018; Rose 1997). To qualify this partial, limited and situated research, I do my best to reflexively present my role in the research, the choices I have made in the process and the limitations of this research. I deliberately write 'do my best', as I am not able to fully understand reflexively neither my role, the context or the impact of the research, because of the ongoing developments, inevitable uncertainty and 'messiness' of doing research (Lincoln, Lynham, and Guba 2018; Rose 1997). What I can do is lay out my reflections about methodological choices and reflect on what I have learned from the choices that I have made in the process. If we understand research as a craft, improvement has to do with learning from the mistakes that we inevitably make in the process (Tanggaard and Brinkmann 2015).

The second suggested criterion for qualitative research is **recognisability** (Tanggaard and Brinkmann 2015). Recognisability is presented as a qualitative quality criterion alternative to generalisability, and instead of aiming for the conclusions to be generalisable to various contexts, qualitative studies like this one are concerned with the richness of detailed and contextual analyses, the **thick descriptions** (Geertz 1973). With inspiration from anthropologist and proponent for thick descriptions Clifford Geertz (1973), the qualitative task is "… not to codify abstract regularities but to make thick description possible, not to generalize across cases but to generalize within them" (Geertz 1973, 26). This idea is based on the understanding that all situations represent a duality, meaning that situations are always both unique and typical (Delmar 2010). So although the small stories told by the young Copenhageners are probably not the same as the stories told by people in other contexts, the analysis of these stories contain reflections about the social dynamics and the complexities of the phenomenon. I have aimed at developing analytical categories that show both typicality and particularity of the participants' small stories (Delmar 2010; Saukko 2000).

In addition to the interactive element that the focus groups added to the design, they also worked to validate the recognisability of my preliminary analytical work among the participants. Others have suggested to evaluate the recognisability of the analytical work either among the research participants or people in similar situations (Elliott, Fischer, and Rennie 1999; Tanggaard and Brinkmann 2015). In research with epistemological roots in constructivist approaches (as this is), the combination of individual interviews followed by focus groups is said to enhance the validity of the conclusions, as it enables the participants to present and negotiate different dimensions to the research questions and to discuss preliminary analytical points (Halkier 2018). However, as researchers, we can never be sure that participants speak up, if they disagree with the analytical categories or themes (Halkier 2018; Tanggaard and Brinkmann 2015). I consider it a condition for qualitative research that we, the researchers, cannot know for certain whether the people we engage with when doing research are always saying what they are thinking or telling us what they want to tell us (Kusenbach 2003). What we can do is work with creating environments that feel safe enough for the participants to share various ideas. Later in this chapter, I describe how I have worked to make the interview and focus group environments comfortable and safe. I did not present the final analytical categories to the participants due to time constraints, but it could possibly have added another layer of evaluation of the validity of the analyses, if I had given the participants the chance to discuss the recognisability of them.

Instead of aiming for generalisability across contexts and scales, recognisability and analytical generalisation can be the qualitative alternative to formal generalisation (Delmar 2010; Flyvbjerg 2006; Freudendal-Pedersen 2016b). Analytical generalisation entails that patterns, theories and concepts can be transferred to other contexts (Neergaard 2007).

My role as a researcher

In the pursuit of process transparency, I have presented arguments for the methodological choices I have made and some of the learning points from these choices. In the next chapter, I present the sociological foundations of the thesis. Another aspect of this aim of transparency in the research process has to do with my role as a researcher (Elliott, Fischer, and Rennie 1999). As a researcher, I have been part of and co-constructor of the research, rather than an outside or neutral observer. Inspired by hermeneutic phenomenology, I understand that it is not possible for researchers to fully bracket our own "being-in-the-world" (Bradbury-Jones, Sambrook, and Irvine 2009). I am a woman living in Copenhagen and in the same age group as the young Copenhageners who participated. I do not live in any of the two neighbourhoods, but close to where the Nørrebro participants live. Having a background that is somewhat similar to that of some of the participants has proven to be both advantageous and challenging. It is my assumption that I

share some "common sense-understandings" with the participants and that I take some of the same things for granted that they do regarding climate change and Copenhagen (Bech-Jørgensen 1994; Schutz 1971). During the interviews and focus groups, I have tried my best to ask clarifying questions about how the young Copenhageners understood phenomena or what they meant by what they said – even at times when I thought I knew what they meant. This way I have tried not to apply my own assumptions and interpret the Copenhageners stories in situ, but to let the participants elaborate. This has been my strategy, but as it is difficult to lay out all assumptions and be clear about all assumptions, I have almost certainly overlooked something that I took for granted and not been aware of a need to ask the participants to elaborate.

My interest in studying how climate change is storied in everyday life is founded in both academic interest and experiences from my own life. I am a person living in the Global North with a high usage of the world's resources. Although I have spent the last three and a half years reading and writing about this issue and several years before that doing climate-related work, my life is not dramatically different from most people that I know, who also lead what has been termed high carbon lives (Urry 2011). I am sometimes struck by a paralysing anxiety and have difficulty sleeping when thinking about what the climate future might be like. Nevertheless, I have not made fundamental changes as a result of the knowledge that I have about that state of Earth's climate. Sure, I sort my waste, I mostly buy items and clothing second hand, I do not own a car, and I have made dietary changes. I have made tangible, but tiny changes in my life, but I am still deeply entangled in a system that is inherently using more and more of the world's resources, putting still more pressure on the Earth. These entanglements are so natural that I doubtless do not realise many of the resource-demanding activities I do – or I simply close my eyes to the consequences of my choices and the possible solutions, because it is too much to take in. It puzzled me how it can be that many of us (be it us as human beings in general, politicians or company leaders) have still yet to take the drastic climate action that is said to be necessary. My curiosity about this puzzle led me to initiate the research.

My academic and professional background has also formed how I have approached the research. I have an educational background in social science, planning studies and geography, and I have later worked professionally with climate change in municipal planning. My educational background has driven my interest in studying climate change as a social and sociological issue, and the research is based on qualitative methods and theoretical perspectives. I place the analysis of everyday life perspectives within an urban planning context and argue that the two levels are entangled. This is inspired by Jensen's (2013) staging perspective.

In this thesis, I utilise sociological perspectives and methods often used in the sociological discipline, and I include perspectives from anthropology, geography, planning studies and other social scientific perspectives in the conceptual framework and analysis, based on the idea of fluid or loose disciplinary boundaries (Hesse-Biber 2012; Hulme 2008). This disciplinary openness is grounded in my academic background in interdisciplinary research environments. I have studied and worked in the field of mobilities research, and an idea that I have come across in the mobilities research community is that scientific work can benefit from working beyond traditional disciplinary borders (Freudendal-Pedersen and Kesselring 2016; Sheller 2014; Urry 2000). Having an academic background formed in this transdisciplinary community has inspired me to look for perspectives outside the sociological discipline, when necessary.

Another perspective that I have brought with me from mobilities research is the understanding of the dialectic processes between actor and structure, between everyday life and the urban planning context, between individual and society (e.g., Freudendal-Pedersen 2016b).

Doing research as a female researcher

During the research process I have at numerous occasions been aware of myself and my role as researcher, both in relation to my body and my gender. I have already presented reflections about making my physical appearance fit into the context when doing the interviews. The bodily aspect of conducting research has also entailed a racing heart, sweaty palms, cries of frustration or joy during the ups and downs of the process as well as fatigue and muscle ache from the many hours in front of the computer. Like patchwork quilting, research is a craft, and conducting research is definitely emotional and bodily work as well as brain work (Flannery 2001).

It has been neither possible nor in my interest to bracket my gender when doing this research. Being a female researcher has entailed certain implications, and I have been confronted with my gender both directly and indirectly, by the words of others as well as by my own thoughts. Most particular, perhaps, are the reflections I had about the process of constructing the empirical materials. Meeting people that I did not know and asking them to lead the way around their neighbourhood on the walk-along was something I considered the possible risks of doing. This awareness of possible risks for me as a female researcher was not triggered by experiences with any of the participants in this research, but by my knowledge of the structural gendered dangers and risks for female[22] researchers doing fieldwork as well as past personal experience (Clark and Grant 2015; Warren and Hackney 2000).

[22] When I write 'female', I refer to persons who have female pronouns as their preferred gender pronouns. When I mention 'male participants', this is the gender I have assumed.

I was not subject to harassment or assault in the process of this research, and I was not conducting research in a dangerous context, but I find the risks and dangers of assault and sexual harassment important to speak about and discuss even though it might be uncomfortable to do so. This is especially important because many non-female researchers are seemingly unaware of the issue of gendered differences when conducting research (Clark and Grant 2015). Discussing the risk of dangerous and unpleasant gendered situations in research may help us to better understand these as structural and not individual issues.

Throughout the process, I have reflected on how my own feminist point of departure has been reflected in the research and in this written product of my work. My feminist approach to this research is more focused on methodological and theoretical aspects than on empirical ones. By this I mean that I do not apply a gendered lens on the empirical materials, and I do not do analyses of gendered differences or study the issues of minorities. My empirical scope is quite homogeneously focused on a group of somewhat wealthy and privileged Copenhageners living in the Global North. What I mean by a methodologically and theoretically focused feminist approach is that I have approached the research question curiously and critically, and I have been reflexive regarding which scholars I cite. Sara Ahmed (2017) writes that it matters how we generate knowledge, who we cite and how we approach the work. Ahmed elaborates on the role of citation: "Citation is feminist memory. Citation is how we acknowledge our debt to those who came before; those who helped us find our way when the way was obscured because we deviated from the paths we were told to follow" (Ahmed 2017, 15–16). Through the writing process I have become more aware of the memory that I also contribute to through the citations in this work, and I have strived to be reflexive regarding who I cite in this thesis. I have not intentionally avoided what you might call the 'obvious choices' of scholarly works to cite, but I have tried to also cite works that are less canonical and more contemporary and issue-related. It has been a reflexive choice to try to cite more female scholars. This is a choice that I have made partly because of my feminist reflections regarding citation, and partly because the issue of climate change is, as asserted in the introduction, a **messy** or **super wicked** problem that is difficult, if not impossible, to grasp with single theories, however classic they might be considered (Fischer and Gottweis 2012; Levin et al. 2012). My hope is that this might inspire you to read works and go down paths that you we not initially familiar with (Ahmed 2017).

Strategy for the analysis

The strategy for the analysis mirrors **the abductive process** of the research, and the analytical work has been a reflexive ongoing activity throughout the research process and not solely work I did in the last phase of the process (Alvesson and Sköldberg 2018; Blaikie 2011; Coffey and Atkinson 1996; Hartmann-Petersen 2009). The analytical work developed from the initial formulation of research questions, through theoretical readings and methodological choices before, during and after the interviews and focus groups as well as in the analytical condensation and categorisation of the empirical material and the final stitching together of the various chapters to conclude the work. I have focused the analysis on interpretations of intersubjective meaning-making processes, based on the young Copenhageners' stories about how they experience and respond to climate change in their daily lives (Blaikie 2011; Launsø, Rieper, and Olsen 2017). On the following pages I describe my strategy for the analysis and how the analytical chapters have developed through coding, sorting, categorisations and interpretations of the empirical materials and theoretical perspectives. I primarily engage in the development of the analytical chapters 6 and 7. Chapter 4 introduces the analytical part of the thesis, but this chapter is somewhat different to the later ones, because its analytical focus on (some of) the approaches to climate change in Copenhagen serves as a framing of the following chapters.

Developing the analysis

Qualitative analysis has been termed a process of "sorting out the structures of signification" (Geertz 1973), and a process with no "single right or most appropriate" route from the construction of the empirical materials to the writing of conclusions (Coffey and Atkinson 1996). The abductive development of the analysis was similar to patchwork quilting in that it was planned, but not determined in advance. I have developed the analysis in an abductive process with the aim of interpreting the young Copenhageners' small stories about climate change. The analysis is both empirically and theoretically informed, and I have applied an openness to both the empirical materials and theoretical inspirations. I have used the theoretical perspectives as a source of inspiration when analysing the empirical materials, rather than as concepts that I have mechanically or rigidly applied (Alvesson and Sköldberg 2018). What goes for both the analysis and the patchwork quilt is that neither is "… merely a hodgepodge of fabric—it has a specific purpose and context" (Koelsch 2012, 824). As I have argued throughout this chapter, I have made informed choices about the empirical materials and methodological approach, and as I will present in chapter 4, the same is the case for the theoretical choices I have made. I did not develop the analysis using "completely coincidental scraps" (Flannery 2001, 641), but with specific empirical, methodological and theoretical alternately guiding principles.

My aim of the analytical strategy was to exploratively combine a theoretically informed outset with an openness to perspectives that I did not know about until I worked with the empirical materials (Olsen 2003). The primary empirical data that I have used in the analysis are the transcriptions of the sound files of the interviews and the focus groups. I transcribed all the interviews in Danish, and I later translated the quotes that I make use of in the analysis into English. Transcription is considered part of the analytical process and an investment in the flow of the analysis (Hartmann-Petersen 2009; Riessman 1993). It not only activates the coding process, but also enables an overview of the material and sets the researcher back into the interview situation, making it easier to remember accentuations, moods and reactions (Hartmann-Petersen 2009). In addition to the transcribed interviews and focus groups, I have written notes throughout the process – at meetings, before and during courses, during and after conducting the interviews and focus groups and while writing the thesis. With help from the notes, I was able to revisit some of my previous lines of thought, see the development of my analytical ideas and be reminded of aspects that I had found important at the time I wrote them down, but had since forgotten.

The starting point for the development of the analytical chapters was to code the transcribed interviews. Some codes and categories emerged from the empirical data, some from theoretical perspectives and concepts and most from a dialogue between the two, often with help from the notes I had taken in the process (Kristiansen 2015). The analytical chapters developed from the condensations and categorisations, in what Coffey and Atkinson (1996) have called a combination of data reduction and data complication:

> "In practice, coding usually is a mixture of data reduction and data complication. Coding generally is used to break up and segment the data into simpler, general categories and is used to expand and tease out the data, in order to formulate new questions and levels of interpretation" (Coffey and Atkinson 1996, 30).

I did the initial coding of the transcribed files using the data analysis software NVivo. Most of all, the software eased the process by facilitating a structure and overview of interview quotes and codes (Kristiansen 2015). Reading the transcribed interviews several times, sometimes while listening to the sound file, I looked for themes, repetitions, metaphors, key themes, similarities and differences, contradictions and paradoxes in and across the different interviews and coded these. I used NVivo's search function to search across all files, when I had developed a code, to see if I had overlooked a mentioning of a word in the interviews and used the software to store the codes and categories

(Kristiansen 2015). By attaching more codes to the same quotes, I developed new interpretations and sometimes found that quotes seemed more fitting a new category.

I continued the analytical categorisation through numerous condensations, writings, arrangements and rearrangements of quotes from the interviews and focus groups into various categories. This part of the analytical work I did in a more analogue manner by writing and drawing on sticky notes, posters, in notebooks and sometimes on whatever was at hand such as napkins or the back of receipts and envelopes. Doing this part away from the computer I could move notes around physically, group different quotes and themes and trace the development of the categories. This analogue approach created another kind of overview and added a much-needed sensory aspect to the analytical process. Below is a photo of a page in one of my notebooks showing the process of the initial

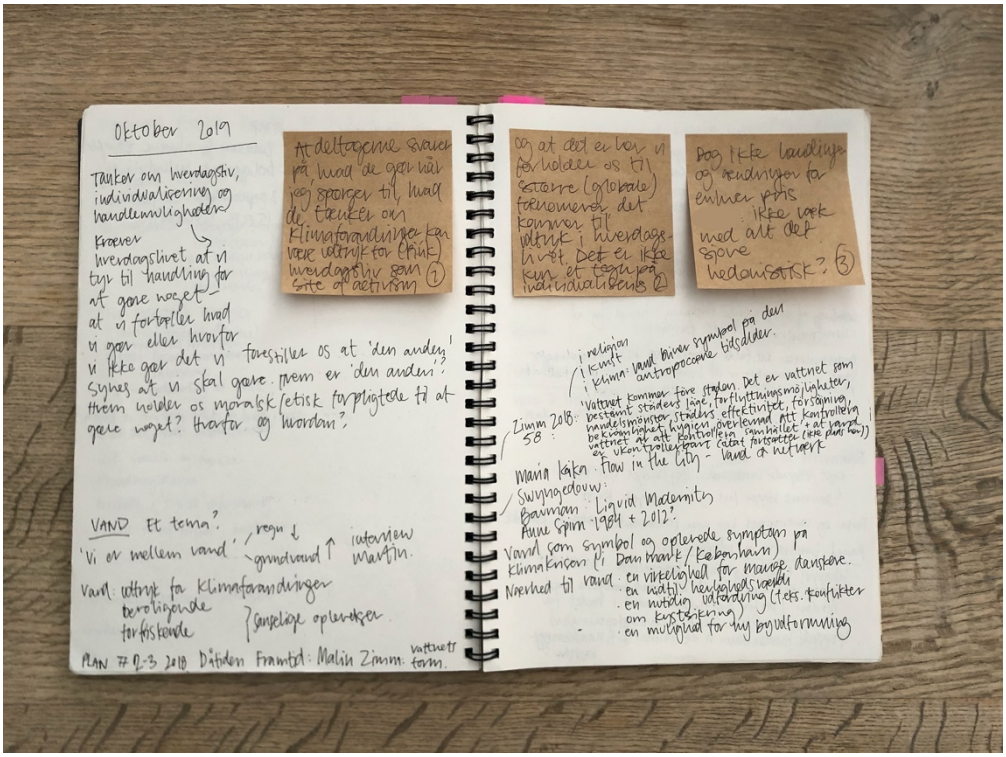


Figure 6: Photo of my notes showing an example of how I have used notes when developing analytical ideas. I have blurred one of the participants' names on one of the sticky notes (photo by me).

analytical categorisation in October 2019. The photo below shows how I have worked with trying out different ideas, themes and theoretical perspectives for the analysis.
The preliminary analytical categorisations took various forms in the process. The first was a thematic coding based on the themes that the participants talked about, for instance food, waste, movement and clothes, but these themes were not analytically elevated. The

second form was various core stories about response strategies, for instance reducing, reusing, maintaining and changing. In this form, the small stories about experiences did not fit. The third and final analytical categorisation is based on the young Copenhageners' ways of talking about climate change in the individual interviews.

Initially I thought that the analyses would concern how the young Copenhageners talked about their understandings of and experiences with climate change. However, when I asked about their understandings of climate change, they would tell me how they responded to the phenomenon. Instead of discarding these aspects, I rearranged the strategy for the analysis to include these stories about responses and added new theoretical perspectives that enabled me to interpret these stories (Alvesson and Sköldberg 2018; Blaikie 2011; Halkier 1999). The overall analytical structure was formed after this. In chapter 6 I explore small stories about climate change as experienced in various ways. The small stories about responding to climate change is the focus of chapter 7. In these two chapters, I draw on quotes from the interviews, focus groups and theoretical perspectives as my guidance for the development of analytical categories and points. I have chosen to include long quotes because the details, nuances and the language that the participants use to talk about climate change are crucial in the exploration of small stories. Including the long interview and focus group extracts enables you, the reader, to interpret along when reading. In relation to the patchwork quilt metaphor, that I introduced in chapter 1, the long quotes can be understood as patterned patches, that can be looked at closely and as part of the whole, from a distance.

The analytical process of coding and categorising was not a clearly defined process, but entangled with the writing process, and new categories and patterns sometimes appeared as I wrote. Similar to **writing as method**, I have used the process of writing to think analytically and new codes, categories and headlines developed in ways that I could not foresee before writing (Richardson 1994; Richardson and St. Pierre 2018).

In the writing process I shifted the focus from some of my initial ideas for analytical themes and change the analytical emphasis from the theme **urban nature** to **weather**. In my initial work with the research question, I focused on nature in cities, policies for urban nature and was interested in the role of e.g. trees, water and biodiversity in climate change stories. This interest was formed partly by my background in municipal urban planning administration and partly formed by inspiration from scholars engaged with the role of nature in cities. The interest inspired the theme of urban nature in the interview guide for the individual interviews, particularly the questions relating to experiences in nature, for instance urging the young Copenhageners to tell me about their experiences

with and thoughts on nature. When coding the interview transcripts, I saw that the stories about experiences with changes in the weather were much more entangled with climate change, whereas stories about nature were more separated from these. The young Copenhageners would commonly talk about experiences with nature as an outing and something other than their daily lives, whereas the weather was mentioned in various ways, when the participants talked about how they experience climatic changes in their daily lives. If we think of the prism, you could say that I looked at the issue from one angle, based on my professional and academic background. The participants' stories represented other angles of looking at the issue. I decided to change the analytical focus to encompass the stories about weather changes.

Concluding remarks

In this chapter I have presented reflections about the empirical and methodological choices I have made in the research process. I have done so to enhance the transparency of the thesis.

The research is conducted with a combination of qualitative methods, including semi-structed interviews, photo elicitation, walk-alongs, online focus groups, an expert interview as well as analysis of municipal documents. The aim of combining various methods has been to enable an analysis of the nuanced and multiple aspects of small stories.

Combining the individually focused interviews with the interactive focus groups, I have been able to explore both individual narrative accounts and the exchange of thoughts, ideas and experiences between the participants. The interviews were prerequisites for the focus groups, as I made use of the analytical categorisation of experiences and responses, that I had developed on the basis of the individual interviews. The two methods are in this sense complementary methods in this thesis.

With the reflections presented in this chapter, I have made visible how the exploratory approach, the abductive research processes and the development of the analytical categorisations and interpretations have formed the research. The openness that I have applied to the empirical materials have been crucial for the development of the analysis.

Chapter 3

Sociologies on climate change

This chapter is the first of two theoretical chapters. In this chapter, I review sociological works on climate change, and in chapter 5 I present the theoretical framework for the analysis of small stories. The review in this chapter is a conceptualisation of dominating discussions and developments in the field: Four somewhat overlapping waves in sociological engagements in climate change: Climate change as a **social issue**, a **construction**, a **risk** and **a condition for everyday life**. Through the chapter, I discuss how these waves have formed the ontological and theoretical backdrop of the thesis. A fifth wave could be included, namely climate change as injustice. The inequalities of climate change in factors such as gender, race, class, geography and economy have become an important discussion in the sociological field (Beck 2010; Bhatasara 2015; Norgaard 2012; Sheller 2020). This discussion is on the edge of the scope of this thesis, and I have not included it as a wave in this outline.

Climate change and other global environmental issues moving in time and place are considered multi-faceted and complex, so-called **messy**, **wicked** or **super wicked** problems, to which single theories and methods are considered not fully adequate, as the uncertainties, risks and complexities exceed the scope of these (Fischer and Gottweis 2012; Levin et al. 2012; Nilsen 1997; Rittel and Webber 1973). The primary theoretical inspirations for the analysis of small stories are, as mentioned, sociological, but I have approached theory with a disciplinary openness that widens the scope and lets me conceptualise different aspects of the small stories about climate change (Hesse-Biber 2012; Hulme 2008).

Mapping sociological climate change research

For many years, climate change research was dominated by natural sciences, but in the past decades, a growing number of social scientists have engaged in questions about anthropogenic climate change and the related consequences (Gundelach, Hauge, and Nørregård-Nielsen 2012; Hulme 2009; Urry 2011). The scopes of social scientific interests in climate change are broad, ranging from macro-level to micro-level analyses, and from anthropocentric approaches like those inspiring this project, to approaches rejecting such privileging of humans, like for instance speculative realism (e.g., Shaviro 2014). These different approaches are seen as a broader movement in the social sciences – a shift away from the modern dichotomy between humans and nature, as either-or, towards ideas of connectedness, of both-and (Beck 2010; Blok 2019; Norgaard 2018). Social scientific climate discussions generally concern the relations between humans and non-humans:

> "We (Western) humans have long understood ourselves and our economic systems as *separate* from the air, clouds, soils, rivers, and waters. The climate crisis seems to be forcing a slowly dawning recognition that we're intricately and intimately woven in the air, land, and sea. That lungs and leaves go together. And it's not just on the large, societal level" (Stoknes 2015, xx–xxi, original italics).

Such an understanding of interdependency and connectedness humans has gained ground in much social scientific work on anthropogenic climate change, making it possible to study climate change as entangled with social life rather than separated from it (Hulme 2009; Norgaard 2011). The works and perspectives in the following review are concerned with the connections between humans and the earthly surroundings, starting with the development of climate change as a problem relevant for sociological inquiry.

Among others, late sociologist John Urry has argued for sociological engagement with climate change. About the connections between the social and material worlds, he argued that "… the social and the physical/material worlds are utterly intertwined and the dichotomy between the two is an ideological construct to be overcome (as much writing in sociology of science and technology has long maintained)" (Urry 2011, 8). Norgaard writes about the possibilities in sociological contributions to climate change research that:

> "… making visible the relationship between "micro," "meso," and "macro" dimensions of social order is the central project of the discipline of sociology. The application of a sociological imagination and a few other sociological concepts allows us to powerfully reframe four central questions in the current interdisciplinary conversation on climate change and the Anthropocene: *why climate change is happening, how we are being impacted, why*

we have failed to successfully respond so far, and how we might be able to effectively do so" (Norgaard 2018, 172, original italics).

Sociology's attentiveness to the dialectics between micro, meso and macro levels along the social emphasis makes it possible for sociologists to ask these pressing questions (Bhatasara 2015; Norgaard 2018; Urry 2011). The emphasis on the social rather than the individual is key for this thesis' analysis of small stories about climate change as something that is experienced and should be responded to. This focus on the social has been criticised by, among others, philosopher, anthropologist and sociologist Bruno Latour, for placing too much emphasis on the social and too little on the interactions between humans and non-human actors (Blok 2019; Latour 2005; A. B. Nielsen and Bislev 2018). The counter-argument from sociologists is that sociology's emphasis on the social organisation of norms and attention to the relations between individuals and societies are specifically important for the study of global issues such as climate change (Bhatasara 2015; A. B. Nielsen and Bislev 2018; Norgaard 2011, 2018). As I, in this thesis, explore the everyday life perspective of young Copenhageners, my theoretical entry point is sociological and focused on the stories told by humans about climate change. In the following, I review sociological works on climate change through the conceptualisation of the four waves, starting with climate change as **a social issue**.

Climate change as a social issue

The first wave is the development of climate change as **a social issue**. By social issue I mean the development of the understanding that climate change is not an isolated physical phenomenon, but an issue that interferes with and alters human lives (Beck 2016; Norgaard 2016; Urry 2011). The development of climate change as a social issue is closely connected with the public attention on the issue. In the following outline, I include works from outside the sociological field, that have been important for the development of public understandings of climate change as an important issue as well as for the sociological understanding of climate change as an issue relevant for sociology.

The general understanding among sociologists is that sociological interest in climate change is relatively new. The relations between humans and the earthly surroundings were previously considered outside the sociological field, and the planetary or earthly surroundings were considered a constant in the background of social life (Gundelach and Hauge 2012; Irwin 2001; Lever-Tracy 2008; Norgaard 2018; Rosa and Dietz 1998). However, Ulrich Beck argued against this, stating that the classic sociologists such as Max Weber and John Dewey "… did have an idea of an unintended dynamics of capitalist

modernization which changes and threatens its own foundations and its frame of reference" (Beck 2010, 256). For most scholars, however, Earth's climate was historically not understood as important for societies: "Climate was typically viewed as immutable, not changing much and not being of great consequence for the ways in which specific societies develop and change" (Urry 2011, 24). Urry named climate a "key category of the twenty-first century", because it is changing (Urry 2011, 24). Geographer Mike Hulme, who has worked extensively on the relationships between climate change and society, points out that by now, change is considered "… the essential character of physical climate" (Hulme 2009, 36). In this sense, it is rather the understandings of climate, not the character of the climate, that has changed. Beck (2010) further argued that it is not the environment or climate that is changing, but society that is transformed by the comprehensive consequences of climate change. The urgency of sociological interest in climate change is emphasised by comprehensive social consequences of changes in the climate which have made climate problems understood as social problems, because they interfere with societies and social lives (Beck 2016; Blok 2019).

The development of an environmental focus in sociology

The development of the so-called **environmental sociology** deserves some attention in this outline as the climate focus in sociology is seen as a continuation of this sub-discipline (Blok 2012). The sociological engagement in climate change developed from a focus on the social implications of broader environmental issues, which was inspired by works in other disciplines. One of the most influential inspirations is biologist Rachel Carson's (2000) work on the environmental issues of pollution (Blok 2019; Catton and Dunlap 1978; Hulme 2009; Urry 2011). Her ground-breaking book "Silent Spring" from 1962 (2000) marked a change in how the consequences of the extensive use of the pesticide DDT, as well as other chemicals developed in the shadows of the Second World War, were understood in the public. Carson warned against the consequences:

> "For the first time in the history of the world, every human being is now subjected to contact with dangerous chemicals, from the moment of conception until death. In the less than two decades of their use, the synthetic pesticides have been so thoroughly distributed throughout the animate and inanimate world that they occur virtually everywhere" (Carson 2000, 31).

Carson underlined the sobriety of environmental issues by placing the consequences of pesticides as the central problem of that age along the then urgent risk of nuclear war:

> "The most alarming of all man's assaults upon the environment is the contamination of air, earth, rivers, and sea with dangerous and even lethal materials. This pollution is for the most part irrecoverable; the chain of evil it initiates not only in the world that must support life but in living tissues is for the most part irrecoverable" (Carson 2000, 23).

Carson's problematisation of the extent and pace of man-made pollution achieved both immense public attention, acknowledgement and criticism (Lear 1999, in Carson 2000). The book has later been declared the beginning of the environmental movement in the 1960s and 1970s that led to new environmental arguments and to the rise of a sociological focus on environment and later climate change (Blok 2012, 2019; Lear 1999, in Carson 2000; Catton and Dunlap 1978; Rosa and Dietz 1998; Urry 2011). In addition to Carson's work, other scientific publications caught the public's attention these years. Among these, "The Limits to Growth" (1972) by Donella H. Meadows and colleagues is essential to this development of an environmental focus in sociology (Hannigan 2006). This book addressed critical implications of the exponential growth in world population, pollution, industrialisation and food production for environmental and wild-life damage and planetary boundaries (Meadows et al. 1972). Meadows and her colleagues problematised the temporal delay in pollution processes as "… there is typically a long delay between the release of a pollutant into the environment and the appearance of its negative effect on the ecosystem" (Meadows et al. 1972, 81). The combination of a temporal delay in the visibility of environmental consequences and humankind's limited ability to recognise and take action on distant issues was problematised by the authors (Meadows et al. 1972).

Through the 1970s human influence on earthly surroundings became acknowledged in social sciences (Hulme 2009). Around this time, the term **environment** replaced **nature** as the term used to describe the material surroundings of social life in descriptions of the consequences of human impact (Blok 2019; Giddens 1997; Nilsen 1997).

The development of climate change as a key category for sociology developed concurrently with different scientific publications and events, from the 1970s onwards[23]. Urry (2011) and Hulme (2009) have both argued that the first seeds towards the contemporary understandings of climate change were natural scientific discoveries made in the 1800s (Hulme 2009; Urry 2011), such as the Irish physicist John Tyndall's discovery of the greenhouse effect in 1859 and later the Swedish physicist Svante Arrhenius' calculations on carbon dioxide's influence on the global temperatures in 1895 (Hulme 2009; Kolbert 2015; Rosa and Dietz 1998; Urry 2011). Many natural scientific climate-related discoveries were made in the 1900s, but it was not until after the rise of environmental movements

[23] The following is a short outline of key events. See for instance Hulme (2009) for a genealogy or Kolbert (2015) for a chronological timeline of climate change-related events.

and the scientific focus on environment in the 1960s and 1970s that anthropogenic climate change became a public issue and an issue for sociology (Hulme 2009; Urry 2011).

William R. Catton and Riley E. Dunlap (1978) were among the advocates of an environmental sociology presented by various sociologists in the 1970s. They argued for a new sociological paradigm that were to break with the human exceptionalism that, according to Catton and Dunlap (1978), made it difficult for sociologists "… to deal meaningfully with the social implications of ecological problems and constraints" (Catton and Dunlap 1978, 42). This human exceptionalism implied that humans were unique to other earthly beings and featured a worldview of optimism and progression (Catton and Dunlap 1978). The sociological discipline had, Catton and Dunlap (1978) argued, focused solely on the social environment of humans, neglecting the physical(Catton and Dunlap 1978). Such a new paradigm failed to appear at the time, but **environmental sociology** has since then developed as an acknowledged sub-discipline, although not unambiguously defined (Blok 2012, 2019; Nilsen 1997).

By now, the argument that humans are part of the surrounding world, rather than unique compared to other species, is widespread across social sciences. Within and around environmental sociology, various traditions have developed, like ecological modernisation, eco-Marxism and eco-feminism, with distinct views on the role of economic growth, relations between humans and non-humans and gender (Blok 2019; Lever-Tracy 2008). I do not go into details about these here, but continue with the development of climate change as a social issue of interest for the public in the 1980s and 1990s.

Various events are mentioned as essential for the public attention on climatic changes in the 1980s and 1990s, for instance the so-called Brundtland Report "Our Common Future" from the World Commission on Environment and Development (1987), in which the terms **sustainability** and **sustainable development** were presented (World Comminsion on Environment and Development 1987). Both terms have been widely influential, although they have been criticised for their emphasis on development and growth (Egmose 2015; Irwin 2001; Urry 2011). In chapter 4 I discuss how the concept has inspired strategic urban planning work in Copenhagen.

Other events mentioned as important for the public attention on climate change around the year 1990 are the establishment of the UN Intergovernmental Panel on Climate Change (IPCC) in 1988 and the Earth Summit in Rio in 1992 (Hulme 2009; Urry 2011). According to Hulme, anthropogenic climate change achieved immense public attention that year, not solely due to new scientific findings, but to the "… convergence of events,

politics, institutional innovations, and the intervention of prominent public and charismatic individuals" (Hulme 2009, 64). Canadian sociologist Sheldon Ungar (1992) has argued that this increase in public attention to climatic changes was closely linked to the so-called **social scare** of an extraordinarily warm summer in North America, as the public interest in the issue declined as the temperatures and weather later returned to what was expected. The massive public attention on climate change can thus be understood as constructed or produced due to certain events and developments, rather than as a given (Urry 2011).

Carson's work (2000), which inspired the development of the sociological studies on human impact on the earthly surroundings, focused on the environmental consequences of pesticide usage. Since then, sociological scholars have studied the relatedness of humans and non-humans and the widespread consequences of human influence on Earth's systems. By now, extensive anthropogenic changes in Earth's climate are considered the most essential environmental issues of our time[24], despite the intangible and complex character of the phenomenon (Urry 2011). In the following I return to the development from **environment** to **climate** as the interest of sociological research or, in other words, climate change as a construction.

Climate change as a construction

The second wave in sociological engagement with climate change concern ontological and epistemological discussions about climate change. A divide between the realist and constructivist approaches in environmental sociology is often brought up in discussions about climate change (Blok 2019; Nilsen 1997; Nørbech 1997; Rosa and Dietz 1998). The two have been presented as opposite ends of a continuum. Scholars within the realist tradition (e.g., Catton and Dunlap 1978) takes natural scientific studies on environmental problems such as climate change as matters of fact, while social constructivists are preoccupied with how these problems are defined and given meaning (Blok 2019; Nilsen 1997; Nørbech 1997). Within the realist tradition, sociological questions of interest concern the impact of climate change on societies, and for the constructivist tradition, key sociological questions concern how climate change is given meaning and how such understandings are socially, historically and politically contextual (MacGregor 2009; Rosa and Dietz 1998). The constructivist engagement in a problem is about what constitutes a social problem (Ungar 1992). Thus, constructivist research on climate change enables a critical study of the social meaning of climate change, and it does not solely reduce

[24] Today, the common understanding among scientists is that human activities influence the Earth's systems extensively (IPCC 2014d; Oreskes 2004).

environmental problems such as climate change to constructions and reject the existence of anthropogenic climate change, as critics have accused the approach of doing (MacGregor 2009; Nørbech 1997).

Within the continuum of the realist-constructivist divide, middle stances have developed. Reflecting on less radical constructivist approaches, Nilsen refers to Evelyn Fox Keller's idea: "That one can study phenomena as social, or as socially constructed, does not necessarily imply that one thinks that everything is social, let alone socially constructed" (Nilsen 1997, 16, my translation). From this follows that phenomena that are not currently constructed as problems can become so in the future (Nilsen 1997). This approach is the epistemological inspiration of this thesis' analysis of how climate change is narrated in everyday life. This **mild** or **less radical** constructivist interest of the issue at stake is about how problems are constructed, not whether they exist or not (Irwin 2001; Nilsen 1997). In this thesis, the analytical exploration of small stories concerns how climate change is talked about in context of everyday life in Copenhagen.

In relation to the construction of climate change as an issue of public interest, Norwegian sociologist Ann Nilsen (1999) has brought up the different connotations of different concepts, in that the broad concept **environmental problems** is less specific and tangible than **pollution**. Similarly, **global climate change** is less tangible than **holes in the ozone layer**, a term that has previously gained attention in public debates (Urry 2011). It might be easier to imagine a **hole in the ozone layer** than global climate change. And as opposed to **pollution**, which might be felt and sensed through breathing difficulties or seen as smog, environmental issues like **climate change** have been considered distant from everyday life as they were not situated in time or space (Nilsen 1999). Further, the complexities of anthropogenic climate change, that a single cause cannot explain it and a simple solution cannot fix it, makes it difficult to grasp (Beck 2009; Nilsen 1999).

In the 1990s and 2000s the scientific and public debates on climate change centred around the term **global warming** (Giddens 2001; Lever-Tracy 2008; Ungar 1992; Urry 2011). According to Urry (2011), climate change debates in those years were dominated by three major discourses regarding global warming: **Scepticism**, **gradualism** and **catastrophism**. Most in opposition to climate change science was the so-called **scepticism** discourse that challenged scientific evidence for anthropogenic climate change, arguing that the evidence was too uncertain (Urry 2011). Middle ground arguments were found in the **gradualism** discourse. The idea was that adjustment to climate change was possible, as climate change was seen as a calculable and linear risk (Urry 2011). Lastly, the **catastrophism** discourse argued that climate change would mean irreversible

changes in temperatures, diversity reductions in animal and plant lives and that little could be done to prevent the dramatic changes (Urry 2011). The issue of global warming was disputed for a long time and both scientists and others doubted the existence of global warming or the human influence on increasing temperatures (Giddens 2001). Today, there are still voices of such scepticism, arguing that there are "too many unknown unknowns" (Urry 2011), although the vast majority of scientists agree about anthropogenic climate change today (IPCC 2014d; Oreskes 2004).

The Anthropocene, the term for a new geological era in which human influence accelerates changes in earthly systems (Beck 2016; Crutzen 2002; Gibson, Rose, and Fincher 2015), has reintroduced the understanding of relatedness and entanglement of humans and non-humans to broader scientific and public discussions, giving renewed attention to the relational understandings of societies and surroundings, humans and non-humans. Today, anthropogenic climate change is considered one of interrelated issues altering life on Earth (relating to, among other areas, climate, biodiversity, ecology, economy, society and social life), rather than an exceptional, isolated issue (Abbott and Wilson 2015; Krogh 2020; Urry 2011). This understanding prompts sociological analyses of environmental issues as part of society, instead of as surroundings external to society (Beck 2009). Recent sociological discussions have focused on the kind of issue that climate change is, and some of the most influential terms have been Beck's (2009) **risk** and **risk society**.

Climate change as a risk

The third wave takes its departure in Beck's (2009) concepts of climate change as a **risk**, an inevitable condition for social life in contemporary societies (Beck 2009, 2016). Beck's sociological diagnosis of contemporary societies places environmental issues such as climate change as the central issues (Blok 2019). His **world risk society** (2009) implies a new phase of modernity, reflexive modernity, in which the consequences of modernity and industrialisation are risks and uncertainties that call for new forms of both reflexivity and policies (Beck 2009). These risks force humans to become reflexive about the uncertainties that the risk society entails and the connectedness to others that such risks expose, as global risks transgress national boundaries (Beck 2009; Beck and Blok 2016; Kesselring 2008).This phase of modernity is not more prone to risk than earlier times, but it is the consequences of decisions and developments in technology, rather than events external to society that make up the risks (Beck 2009; Giddens 2001).

According to Beck (2009), global risks such as climate change are consequences of the triumphs of modernity, consequences that are no longer manageable: "Climate change, for example, is a product of successful industrialization which systematically disregards

its consequences for nature and humanity" (Beck 2009, 8). Climate change is understood as a side effect of modern activities, or as he later termed it, "… the embodiment of the mistakes of a whole epoch of ongoing industrialization"(Beck 2016, 36).

Climate change is, Beck argued, a global risk that imposes a sense of insecurity and can possibly lead to change (Beck 2016). Risk is different from catastrophe, as risk is the anticipation of catastrophe (Beck 2009). The difference refers to the distance in time and space, as risk is the anticipation of a future event:

> "Whereas every catastrophe is spatially, temporally and socially determined, the anticipation of catastrophe lacks any spatio-temporal or social concreteness. […] The moment risks become real, when a nuclear power station explodes or a terrorist attack occurs, they become catastrophes. Risks are always future events that may occur, that threaten us" (Beck 2009, 9).

In "World at risk" from 2009, Beck wrote that climate change was "… not (yet) a reality" (Beck 2009, 85), but a risk with the threat of becoming reality. In "The Metamorphosis of the World" (2016), published seven years later, Beck argued that climate change is drastically altering human existence: "It challenges our way of being in the world, thinking about the world, and imagining and doing politics" (Beck 2016, 20). Although global climatic changes are manifesting as catastrophe elsewhere on Earth, in places like Copenhagen, climate change is generally not talked about as a current catastrophe, and extreme weather events are (not yet) catastrophic in and around Copenhagen. Therefore, climate change as a risk is still relevant for the analysis of small stories.

Global risks such as climate change have been characterised as unpredictable in their outcome and unlimited in time and space, making it difficult if not impossible to calculate or predict the precise consequences (Beck 2009; Giddens 2011; Urry 2011). The complexities and diffuse characteristics of the issue make individuals dependent on experts and the knowledge of scientists, making it difficult for individuals to know how to act (Beck 2009; Gundelach, Hauge, and Nørregård-Nielsen 2012; Nilsen 1997). This constitutes climate change as **a condition** for contemporary urban everyday life, the fourth wave of sociological discussions. The fourth wave concludes this theoretical review, grounding my ontological roots in understandings of climate change as an unintended consequence of modernity and the local and global movement of people, information and goods that characterises contemporary societies (Beck 2009; Freudendal-Pedersen and Kesselring 2018; Urry 2000, 2011).

Climate change as a condition of everyday life

This wave lies in continuation of the discussion about climate change as a risk. Sociologists Ulrich Beck, Anthony Giddens and John Urry have all contributed to the sociological understandings of the dynamics of climate change, the social and societal consequences and possible areas of policy development. Their work concerns macro-level perspectives regarding climate change as inevitable and complex risks that lead to uncertainties and urge reflexivity for individuals (Beck 2009), a systemic view on the relations between climate change and society (Urry 2011) and the challenges for individual, political and institutional action in climate change issues (Giddens 2011). Common for the three is their sociological engagement in questions about climate change and relations between individuals and societies.

Climate change as a condition of everyday life concerns the idea of climate change as both a somewhat distant physical phenomenon and of climate change and everyday life as inextricably related, and climate change is discussed as a complex condition that poses uncertainty in daily life and that demands individuals to be reflexive about global phenomena (Berg et al. 2019; Norgaard 2011; Urry 2011). Taking the notions from risk society that entail uncertainty as an ontological condition, climate change as a condition for everyday life emphasises the inevitable reflexivity that is demanded of individuals (Beck 2009; Freudendal-Pedersen 2016b). Ambivalences are considered inevitable in contemporary everyday life, as individuals have to be constantly reflexive about decisions, events and possible risks (Hartmann-Petersen 2009). Social ambivalence has been defined as a situation in which incompatible normative expectations cannot be solved by the person experiencing them (Becker-Schmidt 1982). This is related to **cognitive dissonance**, a concept introduced by social psychologist Leon Festinger to describe the discomfort or inner conflict that arises for human beings when their behaviour and beliefs conflict (Gundelach, Hauge, and Nørregård-Nielsen 2012; Kjeldahl and Hendricks 2018; Norgaard 2012).

A significant element in the presence of ambivalences in contemporary everyday life is uncertainty. In relation to Beck's (2009) risk society, the anticipation of risks and the accompanying level of uncertainty make up good conditions for ambivalences to become a "loyal companion" for individuals in everyday life (Freudendal-Pedersen 2016b). In relation to climate change as a condition in everyday life, such uncertainty can be about not knowing whether a weather phenomenon is an example of climate change, not knowing the right action to take, not being sure of the impact of certain actions, having opinions different from those of friends and family or not being sure of the effects of one's individual actions.

The concept of ambivalences highlights that most situations are not monochrome and that they are thus difficult to navigate (Hartmann-Petersen 2009). Ambivalences are not solely about the well-researched differences between what individuals think and do, such as knowing about the environmental consequences of driving a car and still driving a car, having attitudes regarding organic food and buying conventional food or being environmentally concerned and showering daily (Freudendal-Pedersen 2016b; Gram-Hanssen 2007; Halkier 1999). Ambivalences also help understanding negotiations when conflicts occur between the desirable and possible, between the ideal and the pragmatic, as the above mentioned situations are rarely clear-cut (Hartmann-Petersen 2009).

Much previous research on everyday life in a changing climate have found experiences to be mediated or rare, and climatic changes have been understood as distant from everyday life (Eskjær and Sørensen 2014; Gundelach, Hauge, and Nørregård-Nielsen 2012; Nilsen 1999). A concern for many sociological researchers on climate change has been the (Western population's) failure to respond sufficiently. This concern has grown with the increase of natural scientific agreement on the issue, as Norgaard argues:

> "Despite the extreme seriousness of this global environmental problem, the pattern of meager public response – in terms of social movement activity, behavioral changes or public pressure on governments – exists worldwide. As scientific evidence for climate change pours in, public urgency and even interest in the issue fails to correspond (Norgaard, 2011)" (Norgaard 2018, 173–74).

This concurrent increased knowledge about the issue and seemingly slight public response, is a paradox. Per Espen Stoknes (2015) has termed it **the climate paradox**: Despite increasingly alarming scientific data about global climate change "… people in many countries seem to care less and less – particularly in wealthy petroleum-based economies such as the United States, Canada, Australia, and Norway" (Stoknes 2015, xviii). Denmark is not mentioned here, but could have been, considering that oil and gas production has been an important part of the Danish economy since 1972 and that the country is the largest oil producer in the EU[25] (Ambrose 2020; Danish Energy Agency 2021). This climate paradox is especially interesting in wealthy, well-educated countries in the Global North, where information about climate change is widespread (Norgaard 2011; Stoknes 2015). Anthony Giddens (2011) has similarly worked with this paradox, in what he terms **Giddens' paradox**: That because of the intangible character of climate change,

[25] Neither Norway nor the UK are part of the European Union.

none or little action is taken. But, Giddens states, when the changes become acute and visible, it will be too late to respond (Giddens 2011). Giddens writes about the focus on the here and now of everyday life matters rather than climate change issues in a distant future: "No matter how much we are told about the threats, it is hard to face up to them, because they feel somehow unreal – and, in the meantime, there is a life to be lived, with all its pleasures and pressures" (Giddens 2011, 2).

Distance has been ascribed as one explanation for these paradoxes, as the global threat of climate change has been recognised as a phenomenon of a distant future, less palpable than everyday concerns about, for instance, work or the well-being of loved ones (Stoknes 2015). For the inhabitants in the Global North, the threat has not previously been connected to immediate everyday life, but has been considered distant in time as well as space (Nilsen 1999).

The Danish study by Gundelach and colleagues (2012) could not confirm Giddens' paradox. Young people were worried about climate change and did want to do something about the conditions. The authors argue that the young Danes were not paralysed, but that they found it contrasting and complicated to navigate climate change in their daily lives (Gundelach, Hauge, and Nørregård-Nielsen 2012).

Norgaard's (2011) research on climate change in everyday life in a small Norwegian town is an example of how the presence of climate change has moved closer. Norgaard (2011) found that unusual weather phenomena, such as an unusually warm winter that caused social, symbolic cultural and economic consequences in the small community, were linked to global climate change. Although the research concludes that the disturbing events caused a socially organised denial among the inhabitants, the research shows that climate change has moved closer to everyday life: "The lack of snow in the community was clearly an unusual event, albeit one that people had come to notice over a period of several years" (Norgaard 2011, 35). Norgaard (2011) engages in what she terms **socially organised denial**, as an understanding of how unpleasant knowledge is dealt with. I do not go into details about this concept here, as it is part of the theoretical framework that I present in chapter 5, but I include the study here as it is central in the sociological engagement in climate change as a condition for everyday life.

Since Giddens (2011) first presented his paradox in 2009 (and again in the second edition in 2011), climate change has become much more present in everyday life around the world. Today, temperatures are increasing, rising sea levels are causing floods, and extreme weather events are recorded more often than before, globally as well as in Denmark. As Beck (2016) wrote, such changes have already transformed our being in the world, "… the way we live in the world, think about the world, and seek to act upon the

world through social action and politics" (Beck 2016, 4). With climate change understood as a condition that changes, transforms or alters everyday life, sociologies on climate change interferes with another sociological field, namely everyday life sociologies.

Everyday life sociologies and climate change

Today, everyday life is a concern for much sociological work, and everyday life sociologies are inspired by various influential sociological thinkers and movements – the development in the 1900s has been called a mushrooming of sociologies on everyday life (Jacobsen 2009). I term the sub-discipline in plural, **everyday life sociologies**, to emphasise the plurality of directions of sociological engagements in everyday life including phenomenological, ethnographic, pragmatist and critical influences and movements (Freudendal-Pedersen 2016b; Jacobsen 2009). I do not review all everyday life sociologies here, but highlight the concepts and understandings that have informed the everyday life perspective with which I approach this research. Everyday life is considered the frame within which individuals understand and experience their immediate surroundings (Bech-Jørgensen 1994; Berger and Luckmann 1989).

Everyday life as a concept is not easily defined, as it is a "… complex and fuzzy phenomenon loaded with meaning, while at the same time it seems deceivingly trivial and tangible" (Jacobsen 2009, 9). One definition that has been acknowledged as valid, is the one coined by Danish sociologist Birte Bech-Jørgensen (Jacobsen 2009), who writes:

> "Everyday life cannot be defined in sociological terms. Everyday life can be described as the life we recreate and reproduce every day. What can be defined, I propose, are the conditions of everyday life and the ways in which these conditions are handled. The symbolic order of taken-for-grantedness is the fundamental condition of everyday life" (Bech-Jørgensen 1994, 291).

Studies of everyday life, then, concern how people cope with the conditions (Bech-Jørgensen 1994; Bennetsen 2019; Hartmann-Petersen 2009), for example Bech-Jørgensen's (1994) research focus on unemployment as a condition for the everyday life of young women. Transferring her understanding of everyday life to this fourth wave – climate change as a condition of everyday life, the everyday life perspective enables an analysis of how human beings deal with and make sense of the issue in their daily life.

Pink has described everyday life as "… where we make our worlds and where our worlds make us" (Pink 2012, 5), and Bech-Jørgensen similarly writes: "Everyday life is reproduced and recreated in the dialectic movements between the conditions and the ways of

handling these conditions" (Bech-Jørgensen 1994, 292). This reciprocal relationship resonates with the ontological roots of this thesis that I have presented in chapter 2 (Bennetsen 2019; Berger and Luckmann 1989; Giddens 1984). Phenomenologists have described the context in which everyday life is lived as the **lifeworld** or **everyday world**, the intersubjective "reality" of close surroundings where we live our lives, a context that is both constituted and constitutive (Schutz 1971; Zahavi 2003). In this sense, what are understood as realities in everyday life are considered constructed and contextual (Berger and Luckmann 1989). In everyday life, routines and common-sense understandings and taken-for-grantedness make it possible for humans to uphold their lives without having to constantly reflect and make choices (Bech-Jørgensen 1994; Edensor 2007; Schutz 1971). However, everyday life is considered not solely made up of routines and predictability, but "… also characterized by dramas, creativity, and a relative autonomy" (Bech-Jørgensen 1994, 292).

With this thesis' focus on the everyday life context of Copenhagen, I focus this short outline of everyday life sociologies on the Scandinavian aspect of this large field. Scandinavian everyday life sociologies have been influenced particularly by the Norwegian sociologist Marianne Gullestad and by Danish Birte Bech-Jørgensen whose work is inspired by Agnes Heller, Alfred Schutz, Peter L. Berger and Thomas Luckmann (Bech-Jørgensen 1994; A.-D. Christensen 2009). Common for the works of the two is that they are

> "… both inspired by Schutz' concepts of 'common sense', 'world within reach' and 'the natural attitudes' in which bodily movement, actions and intersubjectivity are localized in time and space. Both focus on 'ordinary people' and emphasize broad definitions of everyday life as the lived life everyday with other people (Bech-Jørgensen 1994a, 1997a, 1997b; Gullestad 1984/2002, 1989)" (A.-D. Christensen 2009, 309).

Scandinavian everyday life sociologies are characterised by detailed empirical analyses that make the invisible visible, for instance the routines and what is taken for granted in the everyday lives of young women (A.-D. Christensen 2009). It is within this tradition of detailed empirically focused analyses that I place this thesis.

In everyday life, routines, disruptions and ideas about a good life and local and global issues sometimes blend together and sometimes collide (Bech-Jørgensen 1994; Freudendal-Pedersen 2016b). Understanding climate change as a condition in everyday life means that climate change is understood as situated in, rather than detached from everyday life (Beck 2016; Bee, Rice, and Trauger 2015; Bennetsen 2019). It is in everyday life that global issues are experienced and ascribed meaning (Bech-Jørgensen 1994; Bee, Rice, and Trauger 2015; Bennetsen 2019; Mills 2000). Meaning-making is considered cru-

cial in everyday life, and one way of attempting to make meaning of a sometimes meaningless reality is through conversations with others (Bech-Jørgensen 1994; Bennetsen 2019; Norgaard 2011).

Summing up this short description of everyday life sociologies in relation to climate change, the everyday life perspective does offer nuanced perspectives on how climate change is dealt with in everyday life, rather than universal answers (Bennetsen 2019).

Concluding remarks

The theoretical foundation of this thesis is primarily sociological. In order to place the research I have conducted within the sociological field, I have in this chapter reviewed climate change has been discussed in the discipline.

I have conceptualised the review through four somewhat successive and somewhat overlapping discussions that have characterised sociological engagement in environmental issues. The four waves are climate change as a social issue, a construction, a risk and a condition of everyday life. With these four waves I have outlined the development from the initial sociological discussions on the environmental damages of pollution to contemporary discussions on the role of climate change in everyday life. As the fourth wave concerns everyday life, I have ended the chapter with a brief description of the everyday life sociological perspectives and approaches that have inspired this research.

This theoretical chapter contains the overall foundations and inspirations from sociologies on climate change, and in chapter 5, I continue the presentation of theoretical inspiration, by introducing the theoretical framework, the concepts that I operationalise to analytically explore the young Copenhageners' small stories about experiences and responses. Before that, I focus the lens on the urban context. In the next chapter, I scrutinise climate change as an issue in urban planning and how the City of Copenhagen approaches and stages climate change-

Chapter 4

The staging of climate change in Copenhagen

The young Copenhageners' small stories are embedded in the local context and are affected by how climate change is staged. Over the last decades, global climate change has become essential in strategic urban development and visions for creating better cities (Angelo and Wachsmuth 2020; Bulkeley 2013). This chapter frames the analytical exploration of small stories with an outline the development of urban climate action and analysis of the ways climate change is staged by the City of Copenhagen. I use the spelling "the City of Copenhagen" to describe the administrative, municipal institution and "the city of Copenhagen" when I mention the city in general.
I argue that climate change is staged in Copenhagen through the three complementary approaches: **mitigation**, **adaptation** and **collaboration**, and that these are important for the development of small stories. Relating the three approaches to the theoretical mapping in the previous chapter, they are all based on the idea of **climate change as a social issue** (Norgaard 2016; Urry 2011). Mitigation can be understood as the municipal response to **climate change as a risk**, the anticipation of future catastrophe (Beck 2009), adaptation the municipal response to **climate change as a condition** (Beck and Blok 2016; Norgaard 2016; Urry 2011) and collaboration the means to reach the City's goals. The City's overall staging of climate change is as an opportunity for developing the city as well as a risk and a condition (Beck 2009, 2016; Urry 2011).

Everyday life is lived in a situated somewhere. The historical, social, temporal and geographical context of everyday life holds important analytical perspectives, for the analysis of, keeping in the language of Mills (2000), how public issues and private troubles are linked (Bee, Rice, and Trauger 2015; Healey 2010; Mills 2000; Riessman 1993). The understanding is that societies and cities, the structural conditions for human life and the meanings attached to these, are socially or intersubjectively produced (Berger and Luckmann 1989). This way, societal structures and individual are mutually influential, as individuals both structure and are structured (Freudendal-Pedersen 2016b; Giddens 1984). Therefore, the construction or staging of climate change by the City of Copenhagen is important for the analytical contribution of this thesis, because this is the local context in which the small stories are embedded and told, lived, retold and relived (Clandinin 2016; Jensen 2013).

So urban planning and everyday life are interlinked through continuing dialectic processes. In this written thesis, however, these two levels appear separated, as I analyse them in different chapters. This chapter is focused on the urban planning level, and the following chapters concern the analyses of the young Copenhageners' small stories about climate change. In those chapters I include examples of how the participants talked about municipal initiatives, to stitch the two levels together analytically.

Climate change: An issue for urban planning?

Climate change has become an issue that is dealt with and responded to at the municipal level worldwide. Before I outline the development of climate change as an issue for urban planning and look into Copenhagen's approaches to the issue, a few words on what I mean by urban planning are in order.

Urban planning: Definitions and ideas

Urban planning concerns, in the broadest sense, the planning and administration of a municipality's physical development (Post 2018). Planning is future oriented, and it is considered "… an intervention with an intention to alter the existing course of events" (Fainstein and DeFilippis 2016, 8). The late planning scholar John Friedmann (2011) wrote that planning should strive to be transdisciplinary, collaborative, communicative and transactive, and that planning ideally

> "… seeks dynamic balances between the part and the whole, the technical and normative, the empirical and theoretical, the pragmatic and utopian, the near present and the distant future, exchange values and use values" (Friedmann 2011, 11).

Urban planning is considered a balancing act between different scales, actors, approaches and values in the work with public issues with the aim of creating "good" cities and societies (Friedmann 2011; Healey 2011). The formulation of imagined, predicted and desirable urban futures and ideas about what makes a good city is inherent in planning, not least in climate change-related planning work (Bulkeley 2013; Fainstein and DeFilippis 2016; Freudendal-Pedersen et al. 2017; Healey 2010; Jensen and Freudendal-Pedersen 2012). Planning is concerned with a range of public issues, and from the optimistic and rationalistic modernist planning of the 20th century to today's planning in uncertain and complex realities, ideas about the future are essential in planning work (Freudendal-Pedersen, Hannam, and Kesselring 2016; Friedmann 2011; Jensen and

Freudendal-Pedersen 2012; Sehested 2009). According to planning scholar Patsey Healey, it is through planning that imagined futures are materialised and brought into being (Healey 2010). Planning work has developed from being occupied with design and regulations through masterplans and reforms to the contemporary project-driven, pragmatic and collaborative network-oriented planning (Bennetsen and Hartmann-Petersen n.d.; Hartmann-Petersen 2015; Healey 2010; Sehested 2009).

The planning of the city influences everyday life in cities in (at least) two ways. First, the physical planning and design influence the kinds of activities and life that become possible in the city space (Jensen 2013). The physical design decides how much street space is dedicated to cars, bicycles and pedestrians, and how or whether climate change adaptation is integrated into the urban spaces. Likewise, green areas are often planned to facilitate human recreational activities such as sports, playing or dog walking, sometimes at the expense of the lives of flora and animal life in these spaces. On a darker note, the physical design of urban spaces sometimes excludes marginalised groups, through so-called hostile architecture like sharp spikes on flat surfaces to prevent people from sleeping in public spaces. But it is not only the physical planning that influences urban life. How issues are staged and storied in the city also plays a role for life in the city (Jensen 2013; Sandercock 2003). How climate change is presented in the City of Copenhagen's strategies and the grander narratives told about the city influence the small stories about the issue, as these reflect some of the grand narratives.

Urban planning obviously touches upon a wide scope of public issues, but I have limited the scope of the urban planning aspect here to the initiatives directly addressed to climate change. As such, I have not included initiatives and strategies concerning issues indirectly linked to the consequences of climate change, such as strategies for housing an increasing number of inhabitants or strategies concerning biodiversity loss, to name a few.

Urban responses to climate change

As stated in chapter 1, climate change has been termed a **super wicked** problem which no single actor can solve and to which there are no simple solutions (Levin et al. 2012). Today, cities collaborate worldwide to respond to the changes in Earth's climate, as "… city leaders recognise 'both unusual vulnerability and significant responsibility' for climate change impacts (Toly, 2008: 348)" (Angelo and Wachsmuth 2020, 2209). That changes in the climate and urban planning are related is now recognised, but this has not always been the case (Angelo and Wachsmuth 2020; Betsill and Bulkeley 2007; Hoff and Strobel 2013). Previously, international cooperation on climate change and related issues have primarily been nation-state based. Examples of such collaborations are the signing of the United Nations Framework Convention on Climate Change (UNFCCC), one of the three

so-called Rio Conventions (1992), the Kyoto Protocol (1997) and the more recent Paris Agreement (2015), a binding treaty aimed at limiting carbon emissions to prevent further temperature increases (Angelo and Wachsmuth 2020; Bulkeley 2013). The Paris Agreement is dependent on the participation of powerful countries, but in 2017 the then president of the United States of America announced the country's withdrawal from the agreement, which challenged nation-based collaboration further (Angelo and Wachsmuth 2020; Briggs 2021). In February 2021, under the newly elected president, USA joined the agreement, giving new hope for international climate action collaboration (Briggs 2021). The lack of tangible results from these nation-based agreements has made city leaders around the globe collaborate and take action in response to climate change (Angelo and Wachsmuth 2020; Bulkeley 2010; Long and Rice 2019; Meilvang and Blok 2019).

Since the 1990s, city leaders and municipal administrations have entered into climate change-related work and developed visions for sustainable cities. This was following the publication of the Brundtland report in 1987 which presented cities as an actor in international sustainability work (Angelo and Wachsmuth 2020; Bulkeley 2010; World Commision on Environment and Development 1987). The report defined **sustainable development** as "… development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commision on Environment and Development 1987, chap. 2). This anthropocentric concept that coined environmental, economic and social aspects as equally important has, as mentioned in the previous chapter, been criticised for focusing too narrowly on development and Western norms (Egmose 2015; Irwin 2001; Urry 2011). Nevertheless, the concept has been influential for how cities have approached and responded to climate change and other environmental issues. The sustainability concept is considered both "powerful and contradictory", and it is subject to various conflicts of interest in planning (Campbell 2016; Meilvang and Blok 2019). Planning scholar Scott Campbell notes that in contemporary planning, due to the complexities of climate change, sustainability is more about compromising between the sustainable and unsustainable, than about "… seeking an elusive balance" (Campbell 2016, 396). Later in this chapter, I argue how the City of Copenhagen's approaches to climate change can be understood as related to sustainable development. Before that, I return to urban climate change responses.

Because of the ongoing rapid urbanisation resulting in an increasing number of the world's inhabitants living in cities, cities are considered both part of the problem and part of possible solutions to climate change (Angelo and Wachsmuth 2020; Beck and Blok 2016; Bulkeley 2013; World Commision on Environment and Development 1987).

Some argue that there has been a shift from cities being considered a "sustainability problem" to a "sustainability solution" (Angelo and Wachsmuth 2020). Others argue that cities have a paradoxical role in relation to climate change, as they are both producers of emissions and vulnerable to the impacts (Bulkeley 2010). Particularly cities in the Global North have been driving forces in the industrialisation that is considered to have led to the current climatic state of emergency, making the city an odd candidate for the development of solutions (Bulkeley 2010). On the other hand, cities in the Global South are generally more vulnerable to a changing climate, especially coastal cities (Angelo and Wachsmuth 2020; Bulkeley 2010, 2013). Today cities are generally considered central in both the causes of climate change and the actions of responding to climate change (Beck and Blok 2016; Bulkeley 2013). There are also proponents for the nation state as the main actor in climate change work (e.g., Giddens 2011). Others argue that both international negotiations between nation states and collaboration between cities are important (Betsill and Bulkeley 2007). I find the latter argument most productive in the current situation.

One of the arguments for urban responses to climate change has been that it is a global issue to which local solutions are essential (Berthou and Ebbesen 2016). The proximity that municipal administrations have to current activities in cities and the political impact of the city's future development, make urban administrations and municipalities influential actors in terms of climate change action (Bulkeley 2013). More than any other public and administrative institution, municipalities have local political influence on the surroundings for everyday life, not least when it comes to climate change-related work (Bulkeley 2013). How climate change initiatives are prioritised in various cities depends on the local political environment and framing of the issue (Betsill and Bulkeley 2007).

Climate-related planning in Danish municipalities

The scope of municipal influence differs worldwide, and in Denmark the 98 municipalities have great local political influence (Post 2018; Sehested 2009). Danish municipalities are obligated to provide their citizens with welfare services such as childcare and children's education, eldercare and social security (Jones 2018). In addition, the municipalities manage waste separation, local infrastructure and utility as well as various cultural activities (Berthou and Ebbesen 2016; Jones 2018). Since a large municipal reform in 2007, municipalities have been responsible for water management, spatial planning and the management of environmental issues (Jones 2018). The national city plan law from 1938 (and a subsequent circular letter the following year) made it mandatory for all towns with more than 1.000 inhabitants to develop a city plan (Gaardmand 1993). From that time, Danish municipalities have had a substantial role in the urban development as they have been responsible for the urban planning and development, under compliance with existing national and international laws (Post 2018; Sehested 2009). The municipal plan sets

the overall aims for the municipality's development and land use and forms the basis of the district plans over a period of 12 years (Jones 2018; Post 2018; Sehested 2009). It is based on the strategy for municipal planning, which is to be revised every fourth year (Post 2018).

There is a paradoxical standstill in climate change politics, in that the necessity of political action is acknowledged, but not acted upon (A. B. Nielsen and Bislev 2018). In Denmark, there has been a national political focus on climate change for decades, but it was not until 2020 that the first national climate law was enacted (Danish Ministry of Climate Energy and Utilities 2020). This lack of binding national policies has made Danish municipalities engage in climate change-related work outside a national framework (A. B. Nielsen and Bislev 2018). Municipal climate plans are developed in relation to voluntary collaboration with other municipalities (Berthou and Ebbesen 2016; Hoff and Strobel 2013). Danish municipalities authorise locally applicable climate plans which act as guidelines for each municipality' climate change actions (Berthou and Ebbesen 2016). Copenhagen was one of the first Danish municipalities to enact a climate plan in 2009. Today, most Danish municipalities have enacted local climate plans (Hoff and Strobel 2013).

Cities increasingly implement entrepreneurial, market-driven and deregulating approaches, and municipalities are no longer the only actor in urban planning and development (Harvey 1989; Jones 2018; Sehested 2009). Collaboration with various actors and public-private partnerships are now an integral part of urban planning and development both in Denmark and other countries (Fainstein and DeFilippis 2016; Hartmann-Petersen 2015; Harvey 1989; Healey 2010; Sehested 2009). Such collaborations have extended the scope of urban climate change action beyond the traditional municipal focus areas (Bulkeley 2010; Hoff and Strobel 2013). Both companies and private organisations take part in urban planning processes, and local, national and global municipal networks are of increasing importance, not least in regard to the development and distribution of climate change responses (Betsill and Bulkeley 2007; Bulkeley 2013; Sehested 2009).

Climate change in Copenhagen

The staging of climate change is closely linked to how Copenhagen has developed in the recent decades. In the following, I outline how I see the dynamics between the city's development and how climate change and sustainability have been approached.

Copenhagen's development: The rise of a green and liveable city?

Cities worldwide strive to be **sustainable cities**, and this term has become the leading ideal for strategic urban planning and development (Angelo and Wachsmuth 2020; Jones 2018). This is also the case in Copenhagen, and three of the most commonly used words to describe Copenhagen's development in the last decades are sustainability, liveability and growth (Bisgaard 2010; By & Havn 2020; City of Copenhagen 2015; Freudendal-Pedersen 2015a). Additionally, the City has had an international outlook over the last decades which has contributed to development of Copenhagen as internationally recognised as an attractive city (Interview A).

The city has, in the last three decades, undergone a dramatic development from a decayed city to a dynamic and renowned metropolis. This development has been described as a success story of regeneration (Bisgaard 2010). This success story is reflected in the city's plans, and the current municipal plan states that:

> "Copenhagen appears in many ways as a city that has put the challenges of the past behind it for good. In certain cases you could almost argue that the biggest challenges facing Copenhagen are derived consequences of the city's popularity and success. This applies to e.g. the rising housing prices, the pressure on recreational areas and congestion in the city" (City of Copenhagen 2020a, 9).

This, you might say overly positive, articulation of the city's success presents the issues of congestion, increasing housing prices and lack of enough recreational areas almost as necessary evils in the city's successful development. The story of a dramatically transformed city resembles the fable of the Phoenix rising from its ashes. It is from such grand narratives about a liveable city in growth that climate change approaches take their departure. Danish journalist and author Pernille Stensgaard (2013) writes figuratively about this development that the once so dusty, indebted and bureaucratic city is now rich and well-groomed and not easily accessible for all. The other side of the coin of this development are what can broadly be categorised as **gentrification processes** through which a number of people have been excluded from living in the city (Brown-Saracino 2010). I return to this later in the chapter. But first, a few words about current developments in the city.

Copenhagen is currently growing both in the number of inhabitants and in area. The number of inhabitants was 632.300 pr. 1st of January 2020. This is an increase of about 34% since 1995, where the city's population was 471.300, according to municipal statistics (City of Copenhagen 2020c). The City of Copenhagen expects this population growth to continue, and the current forecast is that the city's population will increase its current population by 100,000 people by 2031 (City of Copenhagen 2020a). The city administra-

tion's strategic solutions to the growing number of inhabitants has been urban regeneration of old neighbourhoods, transformation of previously industrial areas to residential neighbourhoods and expanding the city's area by filling up near-shore areas to establish islets (City of Copenhagen 2020a). In the two neighbourhoods where the participants in this research lived at the time of the individual interviews, the city's development is also visible in how the neighbourhoods develop.

Nørrebro is one of the city's old working-class neighbourhoods which has been transformed over the last decades. Young and wealthy inhabitants have moved in, and housing prices have gone up (Nørrebro Lokaludvalg 2017). A modification of the neighbourhood's main street Nørrebrogade in 2010-2011 where busses and bicyclists were prioritised over cars, an urban renewal project in 2014-2019 and climate adaptation projects are examples of initiatives that have contributed to accommodating current needs and developing the neighbourhood into an attractive place to live (City of Copenhagen 2009b; Nørrebro Lokaludvalg 2017; Områdefornyelsen Nørrebro 2014).

Nordhavn is one of the areas that will undergo massive development and expansion in the coming 30 years, from industrial area to the sustainable neighbourhood of the future (City of Copenhagen 2018). The ambition is that the neighbourhood will showcase that "… green growth and quality of life can be realised side by side by establishing renewable energy with a low energy and resource consumption, creating large green areas and providing the neighbourhood with a highly efficient public transportation system" (City of Copenhagen 2018, 6, translation, my own).

Under the headline "It must be easy to live sustainably" (By & Havn 2020, translation, my own), the development company responsible for the neighbourhoods' developments, By & Havn, aims to create liveable and sustainable neighbourhoods along the water front. The headlines **energy and resource efficiency**, **green mobility**, **urban nature** and **community and urban life** frame the development of the former industrial areas in Copenhagen's harbour (By & Havn 2020). The neighbourhood developments along the water front have become popular, and according to By & Havn (2020), the inhabitants in Nordhavn are, compared to all of the city, the third most content with their neighbourhood.

Liveability and sustainability are often used as measures in contemporary urban planning (Angelo and Wachsmuth 2020; Healey 2010). In Copenhagen, liveability is closely connected to the wish to create urban spaces that enable and invite inhabitants to perform a variety of activities in the city, both functional and recreational (City of Copenhagen

2015). The development of the harbour is a visible example of the City of Copenhagen's sustainability and liveability work. The harbour has played a crucial role in the city's development in the last decades and continues to do so in the coming decades. The City of Copenhagen describes the harbour as a "… public space that unifies Copenhagen" (City of Copenhagen 2020a, 41), and its role has been turned inside out in the last decades. From being considered the dirty and lawless backside of the city with its bleak and polluted water, the harbour has become a blue gathering point and the very image of the liveable city (Bisgaard 2010; By & Havn 2020; Carlberg and Christensen 2005).

As the heavy industrial activities were shut down or moved out of the city's inner harbour at the end of the 20th century, large areas and buildings were left empty (Bisgaard 2010; Carlberg and Christensen 2005). This created opportunities for a grand transformation of the city's inner harbour. To house the increasing number of inhabitants and accommodate the needs and wishes of the city's inhabitants, new cultural facilities, recreational activities and neighbourhoods have been developed in areas that were previously used for industrial activities, such as the large areas along the water front, and proximity to the water is highlighted as an amenity value (City of Copenhagen 2018). In addition to the development of new neighbourhoods, iconic buildings that house important cultural institutions were constructed along the water front as part of the transformation. The Black Diamond housing the Royal Library (1999), the Opera (2005) and the Playhouse housing the Royal Theatre (2009) are examples of the transformation of the harbour and the city (Stensgaard 2013). Further, several bridges for pedestrians and bicyclists have been raised in the city's inner harbour to connect the city and promote modes of transportation that are less polluting that fossil fuel based modes of transportation like the car (Bisgaard 2010; Stensgaard 2013). Bryggebroen (2006) was the first of these new bridges and Lille Langebro, the last pedestrian and bicycle bridge so far, opened in 2019. These infrastructural additions have in common that they firstly promote ways of moving around the city that are not based on fossil fuels, and secondly that design is in the centre. They are designed to make the urban spaces visually appealing and inviting. Thus, these infrastructural developments do not solely meet a functional need to connect the city across the harbour. They also contribute to making the city noticeable and attractive for people to visit and stay in, or in other words more liveable.

Sustainability has, in many cities, been narrated as a matter of advantages only, as "win-win" situations with no opportunities losses related to sustainability initiatives (Freudendal-Pedersen 2015a; Rice et al. 2020). Copenhagen's development presented above takes part in the grand narratives about a successful, green and liveable city. However, as I mentioned briefly above, there are social downsides to this development such as increasing housing prices and exclusion of people less well-off people (Meilvang and Blok 2019; Rice et al. 2020). The development of sustainable or climate-friendly urban

areas or neighbourhoods has been criticised for being a new kind of **gentrification**, termed **carbon gentrification** (Rice et al. 2020)[26]. The term **gentrification** was first coined in 1964 by sociologist Ruth Glass to describe the then current development in London, where working-class neighbourhoods were "… invaded by the middle classes – upper and lower" (Glass 2010, 22), resulting in previous inhabitants being displaced. With the term **carbon gentrification**, Jennifer Rice and colleagues (2020) point out a new kind of gentrification process. With this, a city's inhabitants opportunities to live climate-friendly depend on education and income, as access to the neighbourhoods where walking, biking and using public transport is made possible is challenged by increasing housing prices (Long and Rice 2019; Rice et al. 2020). Although I do not analyse the processes of such carbon gentrification processes in this thesis, I include the term here as it points to some of the challenges of the development of sustainable or climate-friendly cities (Rice et al. 2020). In the next section, I present how the City of Copenhagen has **constructed climate change** in relation to the city's development.

Climate change staged as an opportunity and a risk in Copenhagen

In this section I address linkages made between sustainability and climate initiatives on the one hand and opportunities for urban development and international recognition on the other, to argue that climate change is staged as an opportunity as well as a risk in Copenhagen. Climate change has particularly been staged as an opportunity to enhance the quality of life of the Copenhageners and make the city internationally attractive by being a pioneer city (City of Copenhagen 2009b, 2020a; Jones 2018). Already in the first climate plan from 2009, the framing of climate change as an opportunity was stated:

> "… it is not doomsday prophecies that will drive Copenhagen's climate vision. It is the possibilities for creating the environmental capital of the future, that will cause a sensation throughout the world" (City of Copenhagen 2009b, 4, my translation).

As presented here, climate change is not just staged as a risk or condition in urban planning or everyday life, as it has been stated in the sociological field. From the initial climate plan, both the economic and global perspectives were inherent in the staging of the issue: "Climate consideration does not need to be a contradistinction to the economic and social development. On the contrary, the Climate Plan's many initiatives will result in a better metropolis to live in" (City of Copenhagen 2009b, 5, my translation).

With the aim of becoming the world's "environmental metropolis", the goals for reductions of carbon dioxide emissions were related to other global cities (City of Copenhagen 2009b). As an addition to the specific goals for carbon dioxide emissions reductions,

[26] Rice and colleagues developed this term as a particular kind of ecological gentrification, a term developed by Sarah Dooling (Rice et al. 2020).

this aim was presented as being a pioneer city inspiring other cities: "If all other cities and regions does the same, the world will collectively be carbon dioxide neutral (City of Copenhagen 2009b, 11, my translation). Climate change has been staged as an opportunity for the city for gaining international recognition. This is echoed in the current municipal plan, where the sustainability is linked to both liveability and the UN Sustainable Development Goals:

> "Copenhagen is both nationally as well as internationally known for green solutions and an urban development where green solutions go hand in hand with economic growth, job creation and improved quality of life. The sustainable urban solutions will not only contribute to an improved positive development in Copenhagen – they will also contribute to a sustainable development of the cities of the world and promote the realisation of the UN SDGs" (City of Copenhagen 2020a, 50).

By presenting the city's climate-related aims as part of the city's development, the creation of jobs in the city and improvement of the Copenhageners' quality of life, climate change has been staged as an opportunity to create solutions to local issues and to promote these solutions globally (City of Copenhagen 2012b, 2020a). In this sense, climate change-related work is framed in relation to strategic urban development and international competition with other cities (Harvey 1989; Jones 2018). The opportunities presented concern making the city more attractive, and emphasis is placed on added value and co-benefits such as increased life quality for its inhabitants as well as international recognition (City of Copenhagen 2012b, 2015; Jones 2018).

Ideas about sustainability and growth as interrelated are essential in the strategic development of the city. According to Jones (2018), these linkages between climate change and economy have been important for the strong presence of climate change. Others have argued that urban leaders have long considered sustainability and economic growth as mutually constituent rather than obstacles to one another (e.g., Long and Rice 2019). Climate change is also dealt with by market-driven approaches which have become essential in urban planning, as I have mentioned above (Harvey 1989; Jones 2018; Sehested 2009). This can be understood as a continuation of the ideas of sustainable development, first presented in the Brundtland report (1987). However, these linkages sometimes lead to tensions, conflicts and pragmatic solutions that accommodate the deep-pocketed inhabitants over green ambitions (Meilvang and Blok 2019).

Further, climate change is staged as an opportunity for gaining international attention and participate in what has been termed inter-urban competition (Harvey 1989; Meilvang 2021). Copenhagen has received international awards related to liveability and sustainability. The city was voted the world's most liveable city by the Monocle Magazine in 2013 and 2014, the Green Capital by the European Commission in 2014 and the world's best

city for swimming by the CNN in 2018, to name a few (By & Havn 2020; Jones 2018). The current municipal plan 'Copenhagen's Municipal Plan 2019: World city with responsibility' (City of Copenhagen 2020a) forms the basis of the physical development in the city, but the political aims of the plan also set the tone for the coming years. In this municipal plan, Copenhagen is presented as a global and national role model for green transition:

> "Copenhagen will be a world city with national and global responsibility for the sustainable urban solutions to the benefit of the Copenhageners and the development of new local, regional and national jobs" (City of Copenhagen 2020a, 13).

The image of the city as an international role model is strong in the city's climate change strategies (Interview A, Jones 2018). The story of Copenhagen as a green pioneer city from which others can learn is well established in plans and strategies, and this echoes the widespread stories about Denmark as a pioneer country (Booth 2014). Such grand narratives about Denmark are interesting for the development of the story of Copenhagen as a green city as well as the everyday life small stories. Norgaard (2011) has dealt with ideas of **national exceptionalism** as important framings of climate change in Norway and the United States. National exceptionalism works to confirm a country's citizens in narratives about their country being different from, if not superior to, other countries. In relation to climate change, exceptionalism stories serve to minimise a country's responsibility (Norgaard 2011). Norwegian examples of such national exceptionalism stories are comparisons to the United States (about how they do worse), that Norway is a small country (and thus can only do so little), and that Norway has suffered in the past (and has paid their dues) (Norgaard 2011).

In Denmark, I argue, two national exceptionalism stories in relation to climate change are, first, that Denmark is a green pioneer country and second, that Denmark is a small country (Booth 2014, Interview 8, Focus Group 1, 2). In the exceptionalism story, windmills and bicycles, among others, draw the attention away from Denmark's oil activities and high carbon footprint, both mentioned in previous chapters (Ambrose 2020; Booth 2014; Tukker et al. 2014). The second kind of exceptionalism story – that Denmark is just a small country – works to reduce Danish responsibility by limiting the gains of climate action of a small country, although it can also be understood as an expression of powerlessness (Narud 2019; Norgaard 2011). What is particularly interesting about the two are that they, brought together, appear paradoxical, because the grand narratives about Denmark as a pioneer country which inspires the rest of the world contradict the

second. I include these here, as there are variations of the first story in the City of Copenhagen's climate change-related strategies, although Denmark as a pioneer country is replaced by Copenhagen as an international pioneer city (City of Copenhagen 2020a).

Mitigation, adaptation and collaboration:

Three approaches to climate change in Copenhagen

Today, the City of Copenhagen is internationally renowned for its work on climate change and each year representatives from cities worldwide visit Copenhagen to see and hear about the city's work on climate change initiatives (Jones 2018, Interview A). Climate change has been part of Copenhagen's strategic development since 2009, when the first climate plan was enacted (City of Copenhagen 2009b). 2009 was also the year that Copenhagen hosted the UN Climate Conference COP15, and leading up to the conference there was a momentum of attention on climate change in Copenhagen and Denmark (Berg et al. 2019; Eskjær 2019). The high expectations for a binding agreement were not met, the result of the COP 15 conference instead being a letter of intent (Berg et al. 2019; Bulkeley 2013; Eskjær 2019). Despite the disappointment following the conference, the City of Copenhagen continued since then to include climate change in the development of the city (Meilvang and Blok 2019).

Copenhagen has not (yet) been fatally altered by the physical impact of climate change, but the issue is central in both the city's plans for physical development and in the stories told about the city in political debates and in the communication about the city's future. The expectation is that the city will in the future be affected by increasing temperatures and drought periods, enhanced precipitation and more extreme weather events, and that the city's proximity to the sea will be of the essence in the predicted rises of sea levels (Danish Meteorological Institute 2020b; Jones 2018). Flooded streets and overflowing sewers have already happened in Copenhagen subsequent to cloudbursts that have been attributed to climate change, perhaps most notably in July 2011 and in August 2014 (Jones 2018; A. B. Nielsen and Bislev 2018). Such incidents are expected to happen again, and the city is preparing for these future weather events and their consequences (Jones 2018).

On a general level, institutional climate change response action initiatives can be divided into the two complementary approaches **mitigation** and **adaptation** (Betsill and

Bulkeley 2007; Bulkeley 2013; IPCC 2014d)[27]. **Mitigation** concerns reduction of the anthropogenic greenhouse gas emissions of carbon dioxide, methane and nitrous oxide (Bulkeley 2010, 2013; IPCC 2014d). The main mitigation focus of many municipalities is carbon dioxide – emissions produced by fossil fuels (Bulkeley 2013). This is also the case in Copenhagen. When I mention mitigation in the following, I refer to carbon dioxide emission reduction strategies (City of Copenhagen 2009b, 2012b, 2020a). **Adaptation** deals with adapting the city to current and future consequences of climate change and is based on analyses and prognoses of future events (Bulkeley 2013; Post 2018). Adaptation is a relatively new approach to climate change, but has become more widespread in the last decades as it has become necessary for cities and societies to adapt to existing conditions (Betsill and Bulkeley 2007; Bulkeley 2010). The City of Copenhagen's adaptation strategies have a an overall focus on surface adaptation and added value through co-benefits of adaptation projects (City of Copenhagen 2011; Meilvang and Blok 2019).
In Copenhagen, the two approaches are considered complementary and equally necessary. The City of Copenhagen acknowledges that the climate is changing and that the effects of climate change are already visible and will continue to be so for decades, despite the efforts to reduce emissions. Thus, both mitigation and adaptation projects are needed to make the city more resilient to the consequences of climate change (Interview A).

In addition to the two internationally recognised approaches, I suggest **collaboration** as a third approach important for how climate change is staged in Copenhagen and thus for the framing of the everyday life small stories about the issue. Collaboration is an umbrella term for the various kinds of collaboration that the City of Copenhagen engages in – from involvement of its citizens in achieving the goals to knowledge sharing with other municipalities in national and international partnerships. Collaboration has been central from the enactment of the first climate plan and is part of both the City's mitigation and adaptation plans (City of Copenhagen 2009b, 2011, 2012b). There is a long tradition of collaboration in Danish urban planning, dating back to the planning law of 1970 in which mandatory hearings of various actors in planning processes were formally introduced (Sehested 2009). In the following I present the three approaches in detail.

Mitigation

Mitigation is the first of the three approaches to climate change taken on by the City of Copenhagen. Mitigation is defined by the IPCC as "… a human intervention to reduce the sources or enhance the sinks of greenhouse gases" (IPCC 2014c, 4). The overall vision of the mitigation strategy in Copenhagen is carbon neutrality by 2025 (City of Copenhagen 2009b, 2012b, 2020a).

[27] **Resilience** is a term often used in addition to mitigation and adaptation, but I have not included it here, as it is a more intangible concept than the other two (Long and Rice 2019).

Mitigation is a widespread urban response to climate change, and the possibility of calculating and measuring mitigation aims and results are considered crucial, as it is much easier to measure these effects, compared to other diverse and abstract sustainability measures (Long and Rice 2019). The City of Copenhagen's vision for carbon neutrality in 2025 is a clear and easily measured aim, and mitigation initiatives have been incorporated in many of the City's plans and visions in the attempt to reach this aim (Jones 2018). Mitigation is addressed both internally, focused on the municipal organisation's own emissions, and externally, concerned with how Copenhageners and other actors in the city must contribute (City of Copenhagen 2020a; Jones 2018). It is the external focus that I deal with here. Many cities have been criticised for not approaching mitigation goals in a systematic and structural manner, but Copenhagen has gained recognition for its structured evaluation processes (Bulkeley 2010; Jones 2018).

The City's mitigation initiatives fall under the overall carbon neutrality vision and are focused on the four pillars energy consumption, energy production, green mobility and emissions from the municipal organisation (City of Copenhagen 2012b, 2017a; Jones 2018). As the majority of initiatives relating to energy production, energy consumption and the municipal organisation's emissions do not directly interfere with the everyday life reality of Copenhageners, I do not go into details with these in the following. Instead, I focus on the **green mobility pillar** and the **sorting and reduction of waste**, as these are citizen focused. The first constitutes one of the four pillars, and the latter falls under the two pillars energy consumption and energy production. Transportation and household waste management are two areas that are somewhat tangible in everyday life, as they are both concerned with how the city's inhabitants can contribute to the mitigation aims in their daily life. Cities have limited legislative authority when it comes to transportation and energy consumption actions, and the municipal mitigation approach in Copenhagen is thus based on voluntarism rather than force (Bulkeley 2013; Jones 2018). In the following I present characteristics of green mobility strategies in detail and waste-related initiatives briefly.

Mitigation as promotion of green mobility

Transportation constitutes a large part of carbon emissions, and the City aims at reducing fossil-fuel based forms of movement and promoting what they have termed green mobility – bicycling, walking and public transport and latest autonomous and shared cars (City of Copenhagen 2012b, 2020a; Jones 2018). Given the municipality's responsibility for local infrastructure and spatial planning, transportation and mobilities planning is a large part of mitigation strategies as well as urban planning in general. This area of urban planning has developed from a technical focus on transportation to a broader focus on mobility and people's potential for mobility as integral in everyday life (Freudendal-Pedersen 2016b; Hartmann-Petersen 2015; Sheller and Urry 2016).

The City of Copenhagen aims at reducing the number of trips done by car and to increase bicycling, walking, ride sharing and public transportation (City of Copenhagen 2012b, 2020a). The measurable aim is that by 2025, a maximum of 25% of all trips in Copenhagen are made by the car, and that at least 25% of trips are made by public transport, on foot or bicycle, respectively (City of Copenhagen 2012b, 2015, 2020a). The latest count done by the municipality shows that out of all trips made in Copenhagen in 2019, 28% were made by bike, 21% by foot, 21% in public transport and 30% in cars (City of Copenhagen 2020b). There are still challenges for the City's aims to be fulfilled. Bicycling has increased in the last decades, but so has car ownership, and the mobility-related consequences of COVID19-lockdowns are not yet known (City of Copenhagen 2020b; Freudendal-Pedersen 2015b; Freudendal-Pedersen and Kesselring 2020).

The City of Copenhagen has worked with increasing the number of trips done in green modes of mobility in the physical planning, for instance with expanded bicycle infrastructure, the establishment of a new metro line and improved passability for busses, and through mobility management initiatives such as campaigns and partnerships (City of Copenhagen 2012b, 2017a; Freudendal-Pedersen 2015b). The promotion of green mobility is included in the city's development plans for existing neighbourhoods like Nørrebro, and in the development of new neighbourhoods, such as Nordhavn. In the municipal plan, it is stated that the urban planning of new neighbourhoods focuses on "… accessibility, operation of public transport, bicycle paths, path systems, etc., to ensure a cohesive and sustainable development of Copenhagen" (City of Copenhagen 2020a, 25). Sustainability has, as mentioned, been a guiding concept for the development of the Nordhavn neighbourhood, and this is echoed in mitigation strategies.

With urban mobility, mitigation appears in everyday life not only as numbers and figures, but as tangible strategic initiatives that are weaved together with the aims of liveability. The bicycle, for instance, has become a symbol of Copenhagen, and it suits the image of a high quality of life for Copenhageners (Freudendal-Pedersen 2015a; Jones 2018). Internationally, Copenhagen is recognised as a cycling city and an expansion of the city's bicycle infrastructure is emphasised in the current municipal plan, as an initiative to get more Copenhageners to choose the bicycle instead of the car (City of Copenhagen 2020a; Freudendal-Pedersen 2015b, 2015a; Jones 2018).

Bicycling has had a strong presence in the planning of the city for more than a century, and the City of Copenhagen has promoted cycling as a mode of transportation with economic, efficiency, health-related and liveability-related arguments along arguments about the environmental or climate-related benefits of cycling (City of Copenhagen 2017a;

Freudendal-Pedersen 2015b; Jones 2018). Cycling is thus not solely framed as a climate-friendly choice in Copenhagen, and cycling is considered an ordinary way of moving through the city, as opposed to how cycling is seen as something out of the ordinary and even dangerous in many other Western cities (Freudendal-Pedersen 2015b).

The mobility-related mitigation initiatives are also based on voluntarism, and the City's approach is to encourage and make it easy for the citizens to choose to ride their bike (Interview A). To reach the aim of an increased number of trips made by bicycle, the City has expanded the bicycle infrastructure and implemented various technologies that ease the movement of bicyclists when riding through the city (Freudendal-Pedersen 2015b). Although the City has previously promoted congestion charges as a means to reduce carbon emissions from transportation, national legislation did not allow a so-called toll ring around Copenhagen, and the idea was later abandoned because of insufficient backing from the national parliament (City of Copenhagen 2009b; Freudendal-Pedersen 2015b; Jones 2018). This political development reflects the widespread difficulties relating to placing restrictions on car-based transportation, even in a place like Copenhagen, known as a bicycle city (Freudendal-Pedersen 2015b). In Denmark, as well as in other Western countries, the car is not merely seen as one out of many modes of transportation, but has great importance as the ultimate symbol of individual freedom and success (Doughty and Murray 2016; Freudendal-Pedersen 2015a, 2016b; Freudendal-Pedersen and Kesselring 2020; Urry 2000). The symbolic value of the car is considered a challenge for the promotion of other modes of transportation and has at times resulted in a paradoxical municipal prioritisation of parking spaces for cars over bicycle infrastructure, despite the aims of reducing the number of trips done by car (Freudendal-Pedersen 2015a, 2015b).

Mobilities planning has gained much attention in Copenhagen, and various green modes of mobility are staged as important not solely for mitigation strategies, but also for the quality of life of the city's inhabitants and the continuous development of Copenhagen as an attractive city to live and invest in (City of Copenhagen 2017a, 2020a; Freudendal-Pedersen 2015a; Jones 2018).

Mitigation as waste sorting and reduction

The second area of mitigation initiatives that I highlight here is the sorting and reduction of household waste which has gained much focus in Copenhagen in recent years (City of Copenhagen 2017a, 2020a). The sorting of waste is closely connected to the city's energy production aims because of the possibilities of optimising waste incineration and making use of this for heating and electricity (City of Copenhagen 2012b, 2017a). Further, this area of the mitigation strategy is tangible in everyday life, as there is a great focus on how the Copenhageners can sort their waste in their own households and in public spaces.

Waste sorting is currently based on source separation, in other words separation of waste in the household (City of Copenhagen 2019). Currently, Copenhageners are encouraged to separate their waste into 12 fractions[28], most commonly in large containers placed in the yards of apartment buildings and in public containers (City of Copenhagen 2019). In addition, around the city, recycling centres provide containers for more than 35 fractions and swap centres for items that do not need to be thrown out (City of Copenhagen 2019). The waste sorting initiatives consist of a combination of specific physical initiatives, campaigns encouraging Copenhageners to sort their waste and technological developments that optimise the recycling potentials (City of Copenhagen 2019).

Today, all Copenhageners are encouraged to sort their waste, and there has been a gradual expansion of waste sorting options. In the introduction to the City's waste management plan, the change of norms and gradual getting used to waste separation is emphasised: "The fact is that it is not the first time we need to change our attitude towards the bin. Today, very few people would throw their waste batteries in the bin. Most people know that glass and bottles go to a separate container. And lately, we see that source-separation of plastics and biowaste is a habit that Copenhageners like to adopt when given the option" (City of Copenhagen 2019, 5).

Household sorting of rigid plastic was introduced to the Copenhageners in 2016, and in 2017 both apartment households and single-family houses were included in the biowaste sorting scheme (City of Copenhagen 2017a, 2019). The overall aim is that 70% of all waste from households and light industry will be collected for recycling and that the quality of the sorted waste allows recycling (City of Copenhagen 2019). According to the City of Copenhagen, the amount of waste sorted differs much between households, and the municipality works to inform and motivate its inhabitants to sort more of their waste (City of Copenhagen 2019). The aim is to make separation of waste a "natural everyday habit" to all Copenhageners (City of Copenhagen 2019). There is an interesting parallel between this aim and that the bicycle has become the obvious choice or most common mode of transportation for many Copenhageners, as the aim of making it easy for Copenhageners to make the "right" or most climate-friendly choice recurs in the two approaches. Both approaches are based on voluntarism and encouragement rather than finger wagging.

[28] For the source separation curious reader, the 12 current fractions are domestic waste, paper, cardboard, plastic, glass, metal, bio waste, electronics, batteries, garden waste, bulky waste and hazardous waste (City of Copenhagen 2019).

Waste separation strategies have been implemented in various urban planning projects. In relation to the development of the two neighbourhoods Nørrebro and Nordhavn, the local plan for Nordhavn stated that all new build must have waste separation facilities, and a waste separation project was completed in the recent urban renewal in Nørrebro (City of Copenhagen 2018; Områdefornyelsen Nørrebro 2014).

The sorting and reduction of waste strategies are not only focused on the Copenhageners. Waste recycling has, surprisingly, been linked to the city's image as a sustainable and liveable city through the establishment of the new incineration plant, Amager Bakke, whose roof top features a park and ski slope to create a new Copenhagen landmark and generate attention to the transformation from waste to electricity and district heating (ARC 2021). This is another example of the "win-win" or hedonistic approach to sustainability, that I have also mentioned above (Freudendal-Pedersen 2015a; Rice et al. 2020). The message seems to be that waste recycling and reuse is the opposite of lack of enjoyment, as it enables skiing in Copenhagen all year round, something that has never before been possible, because of the flat Danish landscape and temperate climate.

Copenhagen's mitigation strategies have both an internal and external focus. The external focus that I have touched upon here links the carbon dioxide emissions reductions aims with broader aspects that can improve the quality of life for Copenhageners and make the city attractive for others to visit, live in and invest in. Mitigation initiatives concerning green mobility and waste separation and reduction, are approached as opportunities to develop the city as well as reach the goals of becoming carbon neutral by 2025.

Adaptation

The second approach to climate change taken on by the City of Copenhagen is adaptation. The IPCC defines adaptation as:

> "The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects" (IPCC 2014b, 5).

Adaptation is not a new phenomenon, as societies and individuals have always adapted to changes in the weather and physical surroundings in general, but the uncertainty of future conditions makes climate change adaptation specifically topical, challenging and diffuse (Bulkeley 2013). Adaptation has historically received less attention than mitigation, and the double focus on current events and possible future events has complicated discussions about the extent of adaptation initiatives (Bulkeley 2013).

Climate change adaptation was mentioned as essential already in the City of Copenhagen's initial plans relating to climate change. In addition to emissions reductions goals, the City's climate plan from 2009 and the updated climate plan from 2012 contained visions relating to increasing sea levels and rain and waste water management (City of Copenhagen 2009b, 2012b). The climate adaptation plan from 2011 maps future challenges and possible solutions, and additional specified plans outline the plans for cloudburst management and local adaptation projects in the various neighbourhoods (City of Copenhagen 2011, 2012a; Jones 2018; A. B. Nielsen and Bislev 2018). The City of Copenhagen deals with climate change adaptation at three levels: Developing initiatives that can prevent or reduce the likelihood of climate change-related accidents happening, reducing the scale of such accidents and reducing the city's vulnerability to climate change-related events (City of Copenhagen 2011). The overall adaptation strategy is a combination of surface-based and underground solutions (City of Copenhagen 2012a). Adaptation projects are financed by both public and private investments (City of Copenhagen 2012a). In the following I focus on two key aspects of the adaptation approach in Copenhagen, namely adaptation as management of water and as part of urban development.

Adaptation as management of water

In Copenhagen, adaptation work is specifically focused on challenges relating to water: Increased precipitation, more frequent and intense heavy downpours and rising sea levels such as storm surges and flooding of sewer systems, basements, infrastructures and low-lying areas are mentioned as the main challenges (City of Copenhagen 2011, 2012a). Broader challenges include increasing temperatures and groundwater levels as well as indirect consequences for air quality and public health issues (City of Copenhagen 2011; A. B. Nielsen and Bislev 2018). In Copenhagen, adaptation as management of water is often focused on consequences relating to rain (Meilvang 2019, Interview A; 2021; A. B. Nielsen and Bislev 2018). Much of Copenhagen's sewage system was established in the end of the 19th century, and the capacity of this combined underground management of waste water and rain water has been challenged by the increasing amounts of rain (Meilvang 2019).

Water is necessary and crucial for human existence: "Water is the city's life blood: it drives industries, heats and cools homes, nurtures food, quenches thirst, and carries waste"

(Spirn 1984, 129). Water is life-giving, but can be life-threatening in its absence or abundance, and because of the climatic changes, another layer has been added to how water is an urgent issue in societies and cities throughout the world (Zimm 2018). In the past, the locations of cities were determined by flows of water, and water has been crucial in the societal development for millenniums (Zimm 2018). Copenhagen's location on the coast has been crucial for the city for centuries, throughout its history as a commercial town dependent on the trade and military activities in the harbour and in the recent blossoming of urban life along the water front following the construction of harbour baths and recreational areas (Bisgaard 2010; Carlberg and Christensen 2005).

In modern societies, water was managed and controlled in sewer systems in order to enable industrial activities and today, water makes up both an amenity value and a potentially fatal risk in many cities and societies (Meilvang 2019, 2021; Spirn 1984). With climate change, water, particularly in the form of rain, has become an issue in urban planning, in Denmark most often because of the risk of flooding (Meilvang 2021). The understanding of rain water as a risk is, however, perhaps already changing to an understanding of rain as an opportunity or a resource in urban planning, with the development of adaptation projects (Meilvang 2021). Likewise, the city's proximity to the sea can be understood as a risk because of rising sea levels and as an opportunity, as excessive rain water can be lead into the harbour.

In the last decade, Copenhagen has experienced several so-called extreme weather events, but the City initiated climate change adaptation work before the first extreme cloudbursts happened, based on the anticipation of future changes (City of Copenhagen 2011; A. B. Nielsen and Bislev 2018, Interview A). Extreme weather events such as the heavy cloudburst in July 2011 displayed Copenhagen's vulnerability and accentuated the need for political action (Meilvang 2019; Meilvang and Blok 2019; A. B. Nielsen and Bislev 2018). According to the Danish Meteorological Institute, a cloudburst is defined as 15 millimetres of rain falling within 30 minutes (Danish Meteorological Institute 2012). During the cloudburst in 2011, some places in Copenhagen received more than 50 millimetres of rain within 30 minutes (Danish Meteorological Institute 2012).

The particular cloudburst in 2011 was the worst of its kind in decades, and it became pivotal for the City of Copenhagen's extensive work with climate change adaptation in the following years (A. B. Nielsen and Bislev 2018). Because of the intensity of the event and the tangibility of the damages and costs, much attention was placed on cloudbursts and climate change in the following period (A. B. Nielsen and Bislev 2018). According to Nielsen and Bislev (2018), this cloudburst made the scientific scenarios about climate futures instantly tangible, and it became a so-called reality check for the City of Copen-

hagen. In August 2011, the month following the cloudburst, Copenhagen's climate adaptation plan was enacted after a rushed political process (City of Copenhagen 2011; A. B. Nielsen and Bislev 2018). A year later, in 2012, Copenhagen's cloudburst management plan was enacted (City of Copenhagen 2012a; A. B. Nielsen and Bislev 2018). Copenhagen is now divided into 26 prioritised water catchment areas, to make possible a stepwise adaptation process within a 20 year time frame (City of Copenhagen 2012a).

The cloudburst in 2011 is considered pivotal for how the City's adaptation work has developed in the sense that much of that adaptation work is now centred on cloudburst adaptation (A. B. Nielsen and Bislev 2018). Extreme weather events such as cloudbursts and the 2018 summer (the hottest and driest in decades) have increased the attention to climate change (Danish Meteorological Institute 2018; A. B. Nielsen and Bislev 2018). Lykke Leonardsen elaborated on the advantages of the tangibility of extreme weather events in relation to climate change adaptation compared to mitigation:

> "Climate change is actually much more specific than carbon dioxide neutrality, because everyone who was in Copenhagen on July 2nd 2011 and had to shovel water from their basement or discard tons of things because they were damaged by water, they know what we are talking about. So in this way it is much more physical and you can have images of it […] We do something that prevents water in your basements: Check! There is a direct causal relationship: "I had water in my basement and now we do something so I avoid water in the basement, if there is a new cloudburst". It is more difficult with carbon dioxide: "I don't feel it if we invest in something. And why should we make it difficult for cars in Copenhagen to reduce carbon dioxide. Hello? Where is my gain? It's not there!" […] It is much easier to explain that when we have cloudbursts and warmer summers it is practical to have more green areas to tackle the water and the heat" (Interview A).

The tangibility of heavy rain has given climate change a noticeable place in the planning and development of the city and in the everyday life of the Copenhageners: "*The climate* moved into people's basements, so to speak. *The climate* was suddenly on Istedgade[29] and became a tangible topic to talk about with insurance companies, neighbours and colleagues" (A. B. Nielsen and Bislev 2018, 73, original italics, my translation). With the emergence of extreme weather events, climate change has become more relatable (A. B. Nielsen and Bislev 2018). This resonates with how the participants in this research talked about climate change as both intangible and tangible. I return to analyse this in chapter 6.

[29] A central street in the Copenhagen neighbourhood Vesterbro.

Adaptation as part of urban development

The other aspect of the adaptation approach that I highlight here is adaptation as part of urban development. As Lykke Leonardsen mentioned in the quote above, adaptation often has to do with greening the city, and some kind of transformation of the city's urban spaces is inherent in this approach. Many adaptation projects in Copenhagen are based on the concept LAR, an abbreviation of the Danish "Lokal Afledning af Regnvand" which translates to Local Diversion of Rainwater (City of Copenhagen 2009b; Meilvang 2019). This surface solution concept makes it possible to combine climate change adaptation with urban development and greening of urban areas, as roads, parks and urban areas are utilised to help prevent flooding of the sewer systems (Meilvang 2019, 2021). The aim is to expand the so-called blue and green infrastructure of the city (City of Copenhagen 2012a).

Many of the surfaces in cities are grey, concrete and paving stones that cover much of the city make it difficult for rain water to permeate, and rain water is directed to the sewer system (Spirn 1984). In Copenhagen as well and in most of Denmark, the majority of the sewer systems are combined, meaning that rain water and waste water flow in the same pipes (City of Copenhagen 2012a; Meilvang 2021). This hinders the possibilities for reuse of rain water and increases the risk of flooding, as the pipes cannot contain the excessive amounts of rain water during cloudbursts (City of Copenhagen 2012a; Spirn 1984). In surface-based adaptation projects, grey and solid surfaces are transformed into permeable and often green surfaces, that either lead rain water directly away from the sewer system into the ground or retain rain water, until it can be lead there (City of Copenhagen 2011; Meilvang and Blok 2019). Because of the city's proximity to the sea, some adaptation projects are designed so that rain water is lead into the harbour (City of Copenhagen 2012a). With these surface-based projects, adaptation becomes an opportunity for urban development, and as Meilvang (2021) terms it, rain is reconceptualised from being considered a risk to being considered a resource. This is in line with my previous point, that climate change is staged as an opportunity as well as a risk.

The LAR approach has been implemented in urban planning and development in Copenhagen, and according to Lykke Leonardsen, the City develops adaptation projects with an attentiveness to the distinctive character of the city's diverse neighbourhoods (Interview A). In other words, there is no one size of climate change adaptation that is supposed to fit all neighbourhoods in Copenhagen. As such, in the newly developed neighbourhoods, climate change adaptation is taken into account in the development of new local plans (e.g., City of Copenhagen 2018). The new neighbourhoods are, in the words of Leonardsen, "made to manage rain" (Interview A, my translation). In existing neighbourhoods such as Nørrebro, the municipality has to work within the existing urban structure to make room for adaptation projects. In these neighbourhoods, adaptation

projects sometimes lead to conflicts, because local parks and urban spaces are transformed to make room for rain water (Interview A). Large adaptation projects are often planned in relation to urban renewal projects to create a synergy between urban development and adaptation strategies and to reduce costs (City of Copenhagen 2012a, Interview A).

Climate change adaptation projects pose both opportunities and challenges to urban planning. Because adaptation projects often concern a transformation of urban spaces, new possibilities for urban development and for collaboration with citizens and other actors arise (Meilvang and Blok 2019; Ronnenberg, Stefansen, and Bennetsen 2018). In addition to these opportunities, both internal and external challenges can arise. As mentioned above, the transformation of urban spaces can cause conflicts and frustration among the city's inhabitants, and the transformation of urban spaces demands intersectoral and sometimes cross-municipal collaboration as well as new skills for planners (Meilvang 2019, 2021).

In the adaption approach, the economic aspect is also crucial (A. B. Nielsen and Bislev 2018). The economical focus is twofold. Firstly, surface solutions are cheaper than expanding the sewer system (City of Copenhagen 2012a; Interview A), and secondly, the approach is based on the idea of added value through climate change adaptation, meaning that urban spaces are made greener and/or more attractive through adaptation (Meilvang 2021; Meilvang and Blok 2019; A. B. Nielsen and Bislev 2018). The transformation of urban areas enhance the powerful image of the green potentials of climate change adaptation, and the adaptation approach also works to promote the image of a sustainable and liveable city (Meilvang 2019). Climate change adaptation is thus staged as an opportunity for urban development as well as for Copenhagen's participation in inter-urban competition (Harvey 1989; Meilvang 2021).

Collaboration

The third approach is collaboration which does not play the same part in international climate change literature as mitigation and adaptation, as it is not as directly or technically linked to climate change as those two approaches. I include it here, as I argue that collaboration is crucial in the understanding of how climate change is staged by the City of Copenhagen. As I have shown above, both mitigation and adaptation strategies are dependent on the collaboration with various actors. In addition, collaboration is, as mentioned essential in Danish planning (Sehested 2009). The actors that are to take part in

the collaboration are Copenhageners, companies, knowledge institutions and political actors such as regional institutions and the Danish government (City of Copenhagen 2012b).

In this section, I look into how the City has staged collaboration with the inhabitants and collaboration with international actors in various partnerships. Collaboration with private companies also constitutes an essential part of urban planning today (Sehested 2009), but I do not elaborate on this collaboration form here, as it is only indirectly linked to the everyday life context that I focus on.

Collaboration as involvement of citizens

Various kinds of collaboration have become essential in urban planning, and planning processes no longer take place solely in municipal offices, as the planning and development of cities has come to be project-oriented and collaborative (Hartmann-Petersen 2015; Sehested 2009). As mentioned, there is a long history of collaboration between actors in Danish urban planning, partly because of the hearing obligation in planning processes, and the involvement of citizens has expanded in recent decades (Sehested 2009). This is also the case for climate-change related planning. A couple of times, I have mentioned the terms **wicked** and **super wicked** problem (Levin et al. 2012; Rittel and Webber 1973) to describe the kind of issue that climate change is. One of the characteristics of such an issue is that it cannot be solved by single actors or through single solutions (Levin et al. 2012; Rittel and Webber 1973). This is the underlying basis for how the City of Copenhagen approaches climate change.

One aspect of collaboration is the involvement of citizens and other actors in the development processes of adaptation projects (Jones 2018; Meilvang and Blok 2019; Ronnenberg, Stefansen, and Bennetsen 2018). A second aspect of this approach is the involvement of citizens in mitigation initiatives, in order to reach the aims of carbon neutrality. Both are based on principles of voluntariness and guidance, as it is not traditionally the municipality's role to directly regulate the actions of its inhabitants (Berthou and Ebbesen 2016 Interview A; ; Jones 2018). It is the latter of the two that I look into in the following.

The City of Copenhagen has made it clear that the results of the mitigation and adaptation goals are dependent on collaboration, as the municipality cannot reach these goals alone (City of Copenhagen 2012b). This was already introduced in the city's first climate plan: "… the municipality cannot do it alone. We will set the framework for the broad collaboration, where companies, organisations and citizens can contribute. Solving the climate challenge is not a matter of finding guilty parties or environmental culprits. It is a matter

of reducing the emissions everywhere possible – and about seeing opportunities in what appears as challenges at first" (City of Copenhagen 2009b, 4, my translation).

What is particularly interesting about the framing of the collaboration is the explicit focus on the Copenhageners' everyday life habits and activities, as it is presented in the updated climate plan from 2012:

> "Most important of all is the Copenhageners' support of the plan and the work leading to its implementation. Without the engagement and understanding of the people of Copenhagen, we will not be able to realise the numerous ambitions. A carbon neutral city requires everyone to take a long look at their habits. When we move about the city, a bike and public transport must be our preferred means of transport. Increased waste separation will mean new ways of arranging our kitchens and backyards. We must be willing to invest in having our homes energy retrofitted. Last but not least, we must accept that our city, from time to time, will resemble a building site when we will be installing pipes for remote cooling systems, extending metro lines or constructing new cycle lanes" (City of Copenhagen 2012b, 4)[30].

With this, the City of Copenhagen involves its citizens in the strategic work to reach the goals of becoming carbon neutral and more resilient to climatic changes. This aspect of collaboration is different from the first (involvement of citizens in development processes) as this is directly framed in relation to the everyday life activities, doings and habits of the city's inhabitants. An explicit example of this placing of responsibility on individuals is found in the City's 2025 vision for technical and environmental issues:

> "All Copenhageners can play their part by adopting more responsible consumer behaviour, e.g. sorting waste, leaving the car at home, using sharing schemes, recycling and more careful use of resources such as clean drinking water, electricity and heating" (City of Copenhagen 2015, 14–15).

Copenhageners are encouraged to take part in solving the global issue in their daily lives, and "… the citizen is not only given responsibility for things concerning her own private life, but also for a societal problem through her consumption choices (Halkier 2010; Wilk 2009)" (Berthou and Ebbesen 2016, 514). Everyday life activities are presented in relation to the grand issue through the terms responsible consumer behaviour, as used above, or climate friendly behaviour (Berthou 2013; Berthou and Ebbesen 2016; Hoff and Strobel 2013). This placing of responsibility on individuals, I argue, is crucial in the understanding

[30] To emphasise the importance of the message, this is written in pink block capitals in the plan.

of the young Copenhageners' small stories about climate change, as many of the Copenhageners' small stories about climate change concern how they respond to the global issue in their daily lives.

Placing responsibility for solving environmental and climate-related issues on individuals is neither a new phenomenon nor particular for Copenhagen. It has been widely used in Denmark since the 1990s, when consumer-oriented policies were developed following the Brundtland report (1987) and the UN Summit in Rio in 1992 (T. H. Christensen et al. 2007; Halkier 1999, 2016). Here, it was emphasised that various actors have a role to play, if sustainable development was to be achieved (T. H. Christensen et al. 2007). Since the 1990s, public institutions, companies and environmental organisations have encouraged Danes to act responsibly through, for instance, promoting sustainable consumption, sustainable transport and so-called green or climate-friendly choices (Berthou and Ebbesen 2016; T. H. Christensen et al. 2007; Halkier 2016; Hoff and Strobel 2013).

Collaboration as participation in national and international networks

Both mitigation and adaptation projects can be understood as having both local and global value. The local value of the projects is the practical and functional value that the projects give to the local neighbourhood or Copenhagen in general, for instance a better flow or increased safety for bicyclists because of the expansion of bicycle infrastructure or the prevention of flooded basements and greening of an urban space following a local adaptation project. The global value of these projects is of a more symbolic or abstract kind. This value has to do with the national and international promotion of Copenhagen as a liveable and sustainable city, for instance through photos and films showcasing the city's multifunctional green and blue infrastructure. International sharing of knowledge has become central for many cities taking climate action. One of the forums for Copenhagen-based climate change solutions are global urban networks (Bulkeley 2013; Jones 2018). C40 Cities is one of such global networks of cities addressing climate change (C40 2021). It was founded in 2005 to have the world's city leaders collaborate on taking climate action (Bulkeley 2010). Today the network consists of 97 cities (C40 2021). Copenhagen is part of C40 Cities, and the city's lord mayor has previously been part of the steering committee, despite the city's small size (Jones 2018). In acknowledgement of the

complexities of dealing with climate change, knowledge sharing between urban administrations is crucial in these networks:

> "In order to handle the climate challenges, it is essential that the cities of the world learn from one another so that we don't all have to reinvent the wheel. Copenhagen willingly shares solutions and experiences in international co-operations and networks such as e.g. C40, Eurocities and the urban co-operation with Beijing. This means that Copenhagen also learns from other cities that are facing the same challenges as regards climate and sustainability like Copenhagen" (City of Copenhagen 2020a, 50).

Lykke Leonardsen called climate change action a "learning process for all" and emphasised that it is a process through which all actors, including the City, gradually learn and get wiser (Interview A). Through these national and international networks, city leaders and administrations worldwide share knowledge about best practice examples of climate-related projects and policies (Jones 2018).

Collaboration is, I argue, an approach equally important as mitigation and adaptation, in the analysis of how the City of Copenhagen has approached and staged climate change.

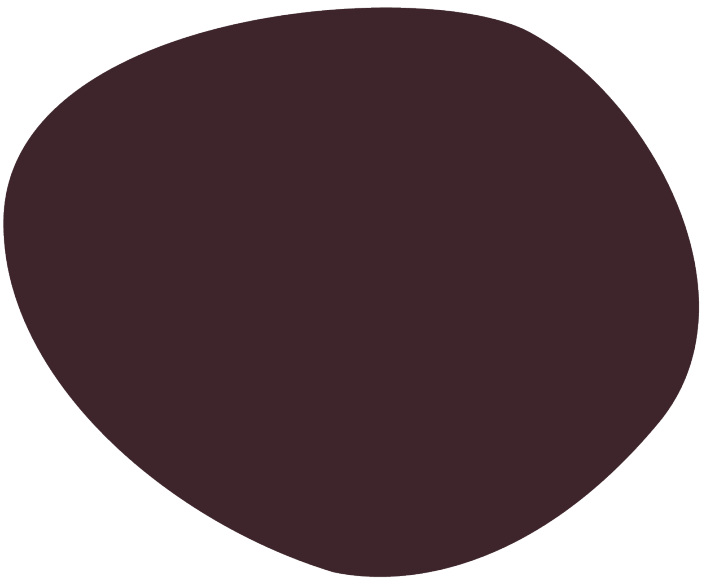
Concluding remarks

In this chapter, I have explored the role of cities in climate change responses in general and the approaches to climate change taken on by the City of Copenhagen in particular. I have done so to frame the following chapters focusing on the analytical exploration of the young Copenhageners' small stories in the context of Copenhagen and planning.

In the past decades, cities have become important actors in climate action, and climate change has become an issue for urban planning worldwide as well as in Denmark. Cities are considered important actors in climate action, partly because of insufficient commitment of nation states.

Copenhagen has included climate change in various strategies concerning the city's development. I have argued that the City of Copenhagen approach climate change through the three complementary approaches **mitigation**, **adaptation** and **collaboration**. As climate change is a relatively new, unknown and constantly developing issue, municipal climate change action is considered a learning process for all. These three approaches fall under the City's overall staging of Copenhagen as a leading green and sustainable city.

Climate change constitutes a risk in Copenhagen, and the expected consequences relate to increased precipitation and temperatures as well as rising sea levels. However, climate change is not solely staged as a risk, but also as an opportunity in municipal plans and strategies. Climate change-related strategies focus on the possibilities for added value in both mitigation and adaptation initiatives. The overall framing of climate change is as an opportunity as well as a risk, and climate change is narrated as an integral part of the city's aim of becoming liveable and attractive. This staging relates to the grand narratives about Copenhagen as a green and liveable city as well as a pioneer city.



Chapter 5

Theoretical framework

This chapter is the second of the two theoretically focused chapters. Whereas chapter 3 contained a review of sociologies on climate change, this chapter is a presentation of the theoretical framework, the concepts and perspectives that I operationalise in the analytical chapters. This chapter can be seen as the theoretical continuation of chapter 3, as I pick up from where I left off, in the everyday life perspective on climate change.

Everyday life in Copenhagen is the context of the analytical interpretations of the Copenhageners' narrative accounts of their experiences with climate change. Experiences with a changing climate are talked about as entangled with other everyday life experiences, and they figure among the unnoticed activities and routines that seem to consolidate a "common-sense" understanding of everyday life (Bech-Jørgensen 1994; Edensor 2007; Pink 2012). The theoretical framework is developed to enable an analysis of the variety and nuances of the participants' small stories. In the following, I present concepts that work as theoretically guiding in the analysis. I present the concepts briefly in this chapter, as I elaborate on them as I make analytical use of the concepts in the following chapters. The framework is divided into two categories that mirror the analytical categorisation, namely the theoretical concepts relating to the small stories about **experiences** and **responses**, respectively.

Concepts for exploring everyday life experiences

By now, temperature increases, a rise in sea levels and extreme weather events are recorded more often than before, in Denmark as well as globally. As noted by Beck (2016), climate change has already altered much in the world. By now it might thus be difficult to see climate change as a solely abstract phenomenon. This is the case for the Copenhageners in this research. They did not solely talk about climate change as an issue of the future. They talked about experiences with such changes as both direct and palpable as well as mediated and impalpable. To interpret these different accounts of experiences with climatic changes in everyday life, I include theoretical perspectives on everyday life **experiences**.

As unfolded in chapter 2, the exploration of experiences in this research relates to the understanding that we as researchers are not able to live or relive the experiences of others, but that we can interpret their representations of experiences through the narrative accounts and stories we are told. **Experiences** is the wider thematical term for the analytical interpretations of how the Copenhageners talked about experiences associated with climatic changes in the interviews and focus groups. In this sense, it is not the actual experiences with climate change that I explore, but how they are talked about. Abbott and Wilson define lived experiences with climate change as "… the sense we make of the changing climate through living our lives" (Abbott and Wilson 2015, 2). As such, lived experiences are understood not solely as the actual situation of the experience, but the ways that such a situation is made sense of. This sense-making, Abbott and Wilson (2015) argue, is entangled with the local context, personal histories, past experiences, collective as well as personal, and influenced by others as well as actions taken.

My analytical interpretations of experiences are inspired by ideas about experiences as both personal and social, contextual and continuously in dialogue with the past and the future (Clandinin 2016; Clandinin and Connelly 2000). Inspired by Dewey, Clandinin and Connelly write: "People are individuals and need to be understood as such, but they cannot be understood only as individuals. They are always in relation, always in a social context" (Clandinin and Connelly 2000, 2). Lived experiences are thus seen as social processes, as the results of interactions between the individual and their surroundings (Abbott and Wilson 2015; Berger and Luckmann 1989; Giddens 1984). Small stories about climate change experiences are thus not merely individual, but developed in interactive processes with others. In this line of thought, experience

> "… does not refer to some precognitive, precultural ground on which our conceptions of the world rest. Instead, it is a changing stream that is characterized by continuous interaction of human thought with our personal, social, and material environment" (Clandinin and Rosiek 2007, 39).

Attending to how climate change is talked about as experienced in everyday life concerns more than studying these single experiences in themselves. This implies that studying everyday life experiences with climate change moves the focus from understanding such experiences as individual to understanding these as placed in a social, cultural and geographical context in which grander narratives also play a role in how experiences are told. Clandinin writes that "… people, place, and stories are inextricably linked" (Clandinin 2016, 41). Small stories are thus not only about the individual narrator, but also about the context in which they are told. How the small experience stories are connected to climate

change must therefore be interpreted in relation to the local context, for instance the sociality, place and temporality of the experiences that are storied (Clandinin 2016). By applying a relational view on climate change experiences, it is possible to explore their contextual aspects. As I have argued in chapter 4, the institutional staging of climate change in Copenhagen plays an important role for how these everyday life experiences with climate change are constructed (Jensen 2013).

As I outlined at the end of chapter 3, contemporary everyday life is filled with uncertainty and this reflects how experiences with climate change are talked about. It is not the intent of this work to describe if or how various everyday life experiences are connected to the changing climate per se, but rather to explore what can be learned from how various everyday life experiences are talked about as connected to the global phenomenon.

The sociological and ecological imagination

A useful theoretical concept for interpretating small stories about daily experiences and connections that are drawn to climatic changes is the **sociological imagination** (Mills 2000; Norgaard 2018). This concept has been a guiding inspiration in the research process. It offers a conceptualisation of the kind of reflexivity that enables people to relate specific experiences to larger issues and understand that larger issues are related to societal structures and that these are not individual problems (Mills 2000; Norgaard 2011).
With the publication of the book "The Sociological Imagination" in 1959, Mills (2000) introduced the understanding that a personal experience can be an expression of a structural issue to which there are no individual solutions. Likewise, a structural issue can be experienced in people's personal and social lives. He used examples prevalent at the time of his writing, like unemployment and divorce rates, to explain the idea of the linkages between personal troubles and public issues (Mills 2000). He also pointed to the, in 1959 highly topical, example of the structural issues of urban sprawl, reasoning that the solution to "the problem of the city" was structural, as solving such issues in the personal milieu is insufficient (Mills 2000).

Reading Mills' (2000) examples today underlines his emphasis on the importance of the historic period in the understanding of social phenomena. Today, other examples of public issues are more pressing, for instance environmental issues such as anthropogenic

climate change. The social imagination that is needed today entails attending to other issues than what it did at the time of Mills' writings. Thus, the social imagination is not fixed, but is related to the specific spatial and temporal context (Mills 2000; Nilsen 1997).

Mills' original examples are classic sociological issues concerned with social and societal problems and not the material or environmental surroundings of human life, and the relations between these. Norgaard (2018) has addressed this and has taken up Mills' concept and developed the idea further in relation to climate change. She argues that both a **sociological imagination** and an **ecological imagination** are now needed. The ecological imagination is the ability to reflect on the relations between human actions and the physical systems of the Earth (Norgaard 2018). According to Norgaard, the natural sciences have provided great progress in the understandings of human impact on Earth's systems, the ecological imagination, but less so in relation to how this might change the sociological imagination:

> "Most of us in modern (western) contexts are alienated from our ecological worlds. We now need an ecological imagination to understand the reality of our circumstances. Making visible the relationships between humans and nature has been the focus of crucial research activity in the climate arena. Atmospheric and ecological scientists have provided important descriptive evidence for the impacts of human actions on the natural world. Yet while the connection between burning fossil fuels and alteration of the climate is understood on a general level, it can still be a challenge to visualize the relationship between driving to work and increased risk of high intensity forest fires" (Norgaard 2018, 172).

The **ecological imagination** is helpful in the analysis of the manifold experiences and understandings of climate change in everyday life. About the general lack of **social imagination** in relation to climate change, Norgaard writes:

> "We are not only alienated from our ecological conditions – unaware for example of the relationship between personal automobile use and the changing precipitation in our local communities. We have also become alienated from our social conditions – seeing our dependence on automobiles as a function of poor choices rather than corporate lobbying by the auto industry, or how our ability to reduce our carbon footprint may be constrained by our nation's foreign policy. Essentially we lack the ability to imagine social structure. As a result, most people can only imagine their impacts on the planet in the form of individualized consumer actions (Shove, 2010; Webb, 2012)" (Norgaard 2018, 172).

The sociological imagination points to the fact that knowledge about climate change is not the only necessity for possibly responding to the issue. Abbott and Wilson similarly note:

> "… to have a social imagination with respect to climate change is not simply to have more knowledge on the topic, but to deepen our understanding of that knowledge. It means that we are prepared to engage broadly and deeply with the topic in combination with other social issues, and to connect it to and embed that greater understanding within our lived experiences" (Abbott and Wilson 2015, 185)

I make use of the notions of the ecological and sociological imagination throughout the following analytical chapters to explore the various relations in the small stories about experiencing and responding to climate change in everyday life.

Ontological security and social scares

Concepts related to the ability to relate the impacts of human actions and Earth's systems are the ideas of **ontological security** and **social scares**. In the following, I present how these two concepts are useful for the exploration of small experience stories. The concept **ontological security** is developed by Giddens who defines the concept as: "Confidence or trust that the natural and social worlds are as they appear to be, including the basic existential parameters of self and social identity" (Giddens 1984, 375). About the role of ontological security, Giddens (1997) writes:

> "Ontological security has to do with "being" or, in the terms of phenomenology, "being-in-the-world". But it is an emotional, rather than a cognitive, phenomenon, and it is rooted in the unconscious" (Giddens 1997, 92)

In this sense, the ontological security is considered closely related to the routines and predictability of everyday life (Giddens 1997). The continuation of this kind of confidence is crucial for individuals' ability to lead an everyday life that is considered meaningful and good, and it is obtained by, for instance, communities and the assurance of living in a world that is stable (Freudendal-Pedersen 2016b; Norgaard 2012). The concept is made relevant, when climate change is understood as a social issue, a risk and a condition for everyday life, in the sense that climate change may threaten the sense of ontological security. Norgaard writes about the relations between climate change and the sense of ontological security:

> "Large-scale environmental issues in general and global warming in particular threaten biological conditions, economic prospects, and social structure. The impacts of global warming on human society are predicted to be widespread and potentially catastrophic. At the deepest level, large-scale environmental problems such as climate change threaten individual and community senses of the continuity in life – in other words, they threaten what Anthony Giddens calls "ontological security" (Norgaard 2011, 81).

Linking climate change and ontological security, Norgaard emphasises that the threat to the sense of continuity can occur both individually and in communities. In the analysis, I

make use of the concept to interpret how we can understand that the young Copenhageners talked about specific weather events, when I asked them about climate change. Relating to the concept of ontological security is the idea of a **social scare**, a term that I have briefly introduced in chapter 3. Ungar defines a social scare as an episode that fosters fear and accelerates the demand for political action (Ungar 1992). In the previous chapter, I presented how the cloudburst in Copenhagen in 2011 accelerated the political process of the enactment of the city's cloudburst plan. This particular weather event can be understood as a social scare, because of the public and political attention it gave rise to. In chapter 6, I make use of the concept in relation to how the young Copenhageners talked about specific weather events that they had experienced.

Climate change, weather and weathering

In the young Copenhageners' small stories, experiences with specific weather events and changes in the weather and seasons in general often came up. As I have mentioned in chapter 2, the weather was not a theme that I had initially included in the research design, but added as I realised how often the young Copenhageners talked about it. The weather has been mentioned as essential for human beings and their doings through all of human history (Rasmussen 2010; Theilgaard 2010) and as an important part of the everyday surroundings, as few everyday activities are not affected by the weather (Vannini et al. 2012).

Everyday life is lived in situated, local contexts, and what is taken for granted is said to be historically, geographically, culturally and socially contextual (Rose 1997). Familiarity with the local surroundings is one of the predictabilities that helps human beings navigate everyday life. In countries like Denmark, the changeability of the weather can be understood as one of the predictable aspects in everyday life (Madzak 2020; Theilgaard 2010).

The weather is (by most people) experienced every day. Weather phenomena such as rain, snow, sunlight and fog are tangible phenomena that we are able to sense and make sense of; the fresh smell and refreshing wetness of summer rain, the soft and almost bouncy feeling of walking in the snow, the warmth of the sun or the blinding blur of morning fog. On the other hand, climate change has been seen as distant in everyday life, as it can be more difficult to sense a global warming of a certain number of degrees. Knowledge about climate change is often communicated through abstract scientific expert statements in the media and not as a form of knowledge learned through experience (Gundelach, Hauge, and Nørregård-Nielsen 2012, 33). As mentioned above, it has previously been difficult for people to make sense of climate change, as it was distant from everyday life experiences.

The weather is a helpful companion for approaching experiences with climate change in everyday life, as it is situated and experienced, and because it is rather difficult to distance ourselves from the weather. Weather and climate are often described with the distinction between respectively short-term events that can be experienced in the present moment and steady long-term patterns through longer periods of time (Hastrup 2011; Strauss and Orlove 2003a). About the difference between the two, Ingold and Kurttila write:

> "Climate is an abstraction compounded from a number of variables (temperature, precipitation, air pressure, windspeed, etc.) that are isolated for purposes of measurement. Weather, by contrast, is about what it feels like to be warm or cold, drenched in rain, caught in a storm and so on. In short, climate is recorded, weather experienced" (Ingold and Kurttila 2000, 187)

Following Ingold and Kurttila, the weather can be experienced as it is situated and contextual, as opposed to climate, which is an abstract concept. This underlines the importance of exploring everyday life experiences of weather in the context of studying experiences of climate change. Contrasting this quote, however, the young Copenhageners talked about climate change as something that is in fact experienced, often in relation to changes in local weather, and climate change is not solely mentioned as an abstraction, but also a specific phenomenon to experience. The climate as a concept may be abstract, but some changes are large enough to raise awareness.

Phillip Vannini and colleagues write: "We sense weather in the present moment, but our sensations are shaped by sensory skills that are informed by both past memories and future expectations" (Vannini et al. 2012, 367). This resonates with the understanding from Abbott and Wilson (2015) that I presented in the introduction of the chapter; that lived experiences of climate change are entangled with other experiences. Lived experiences of climate change may then be specific sensory experiences with weather phenomena in everyday life, because these experiences are connected to past memories of similar experiences and future expectations of, for instance, a changing climate. Because of their knowledge about previous weather and seasons in Denmark and about global climatic changes, the participants associate weatherly changes to climate change. Relating specific weather phenomena and climate change is not straightforward, neither in everyday life nor in academic contexts, and I do not aim to present definite or causal links between the two. My analytical aim is to present how small stories about the weather are entangled with accounts of other daily encounters, and that past and current weather phenomena are associated with climate change by the young Copenhageners.

In an article about local knowledge and the role of climate and weather in a community of Sámi people living in northern Finland, Tim Ingold and Terhi Kurttila (2000) note that for people in the far North, the cycles of the seasons are crucial to people's experiences

with the weather: "… seasonality inheres in the relations between concurrent rhythms of growth and movement of plants and animals, and of human social life" (Ingold and Kurttila 2000, 190). Elaborating on the relations between the seasons and the life in the far north, they write:

> "… seasonal variations are experienced as the interweaving, in a complex counterpoint, of changing harmonies of light, darkness and colour, of freezing and thawing, of cycles of life and death, of the migratory movements of birds, and of human activities of production (berrying, fishing, hunting, herding) and consumption (from eating fish to eating meat). And it shows, too, how every change of seasons embodies a mixture of anticipation and surprise. You know that autumn is coming, but still you try to hang on to summer to the last. And the arrival of winter always catches you out, however much it was expected" (Ingold and Kurttila 2000, 190).

It is obvious that the young Copenhageners are far less dependent on the changing seasons than the Sámi people in the study described by Ingold and Kurttila (Ingold and Kurttila 2000). However, the knowledge and expectation of what awaits in different seasons through the course of the year did come up in the interviews and focus groups, as the young Copenhageners talked about climate change, and this perspective of the importance of the seasons in everyday life is relevant for the exploration of the young Copenhageners' small stories about experiences with climate change.

The weather and the seasons figure as phenomena that the participants in this research mentioned in relation to both their daily life and experiences with climate change. Therefore, my analysis of small experience stories also includes how the weather and the seasons are talked about as part of the sensory experiences and the taken-for-grantedness of everyday life. A concept that helps the understandings of the role of the weather in everyday life is **weathering** (Vannini et al. 2012). Weathering describes the processes through which human beings engage in the weather: "To weather is an active, reflexive, practical disposition to endure, sense, struggle, manipulate, mature, change, and grow in processes that, over time, implicate the placemaking of one's dwelling" (Vannini et al. 2012, 362). Weathering entails an understanding of a dynamic process between human beings and weather (Madzak 2020; Vannini et al. 2012). About weathering and the role of weather in everyday life, Vannini and colleagues write that

> "… weather is not just something that happens, something that is mere contour to other seemingly more important aspects of daily existence. Rather, we have suggested, weather *is* everyday life because its textures and actions inform our place-based existence in multiple and nuanced ways. Few of our mundane activities remain untouched by weather. The weather shapes our personal and social identities, our life styles, our line of work, our

places of residence, and our leisure activities. But we are not victims of weather. As reflexive beings, we act toward the weather much like we do toward other people and other inanimate objects—in agentic ways. As the weather moves, we move" (Vannini et al. 2012, 377, original italics).

The argument is that the ways people live in weather as well as with weather, hold important perspectives for everyday life and lived experiences of climate change (Vannini et al. 2012). As such, the weather can be understood as crucial in the understanding of "sense of place" (Cresswell 2008) and for the sense of ontological security (Giddens 1997; Norgaard 2011). In chapter 6, I make use of these notions of the weather, weathering and climate change, when I explore how changes in the weather and seasons are talked about as associations to climate change.

With an attention to the varieties, details and nuances in the small stories about experiences with climate change, I have developed a framework with inspiration from works of sociological and anthropological scholars. When brought together, these concepts enable an analytical exploration of small stories about experiences with climate change that is partly based on empirically based themes. In the following, I turn to presenting the theoretical concepts that I make use of in chapter 7, for the exploration of small stories about responding to climate change in everyday life.

Concepts for exploring everyday life responses

Small stories about everyday life responses to climate change is the second analytical category. In the following, I present the theoretical perspectives that I make use of when interpreting these. I aim to explore how we can understand these stories as more than matters of either responding or not, and instead explore what can be learned from the narrative accounts. As mentioned, I added this category to the research design during the process, as all young Copenhageners talked about how they take various actions and reflect on various actions in their daily life. The concepts presented in this section help answer the question of how we might learn about the challenges and possible openings for change from these response stories. As with the concepts presented in the section above, I present the concepts briefly here and unfold them in chapter 7.

Response-abilities: Abilities to respond

As mentioned, all participants talked about how they, through various situations in their everyday life, make big or small decisions based on their knowledge about or experiences with climate change. Previous studies have pointed to distance to the phenomena, a deficit of information or inadequate caring as possible explanations for what we can term an insufficient public response to climate change (Burgess, Harrison, and Filius 1998; Giddens 2011; Norgaard 2011). But perhaps the paradoxes of climate change responses is not as clear-cut or defined as presented by Giddens (2011) and Stoknes (2015), and it might be possible to explore the nuances in such responses, if we look beyond these paradoxes.

The notion of **response-abilities** (Freudendal-Pedersen 2014, e.g. 2016b; D. J. Haraway 2016) is a theoretical inspiration for this part of the analysis and the wish to go beyond the understandings of the paradoxes. This notion helps to interpret the variety in the small response stories and explore them as more than either responding or not, as the focus moves from measurable responses and visible actions, to considerations about the individual everyday life abilities to respond to the global issue. The response-ability concept helps the focus on what can be done, as it becomes about the abilities to respond to something or someone and not about answering for and being held accountable for actions that have (or have not) been done (D. J. Haraway 2016; Moriggi et al. 2020). The focus of this research is more about exploring stories about abilities to respond to these changes and less about holding a group of Copenhageners accountable for environmental issues.

Mobilities scholar Malene Freudendal-Pedersen (2014) writes about the word play on responsibility and response-ability, with reference to philosopher Ullrich Zeitler (2008):

> "The word in question is ability. The ability to respond to a common good in a world where individualization is a main driver seems from an everyday-life perspective to be increasingly challenged (Beck 1992; Kesselring 2008; Freudendal-Pedersen 2009). This should not be mistaken for egoism, nor lack of ethics, nor common responsibility" (Freudendal-Pedersen 2014, 146).

According to Zeitler and Freudendal-Pedersen, finding it challenging to respond to a global risk such as climate change, then, is not a matter of egoism or lacking individual ethics. Rather, the understanding is that there are limits to the response-abilities of the individual "… both with regards to its extension and with regard to its quality" (Zeitler 2008, 233). Zeitler differentiates between response-abilities for plants, animals and children (Zeitler 2008), but can different response-abilities also relate to the social, cultural,

geographical and historical context that individuals are part of? How can the notion of response-abilities help understandings of climate challenges in Copenhagen? These are some of the questions of interest in chapter 7.

In a macro-level perspective, the young Copenhageners might be seen as more response-able than those with fewer resources or less knowledge available. But in a micro-level perspective, local contextual challenges for enabling abilities to respond are interesting to explore. Further, the uncertainties and ambivalences understood as inevitable in contemporary everyday life, can blur the understanding of what is actually a proper response and enhance the sense of having little response-ability (Freudendal-Pedersen 2016b).

Response-ability is based on the understanding of relationality between humans and non-humans, a connectedness that implies relations that are based on something other than legal obligations or family ties (Moriggi et al. 2020). Following this, responding to climate change is also a matter of acknowledging the relations and interdependencies between diverse species on Earth. Fjalland writes: "A response to environmental change can be paralysis, ignorance, denial, anxiety, and these can be performed in multiple ways" (Fjalland 2019, 27). I consider the concept of response-abilities to be key in the analytical exploration of small stories about diverse responses: "Individuals can feel responsible but without feeling they have an ability to respond" (Freudendal-Pedersen 2014, 146). I seek to explore the socially organised (Norgaard 2011) meaning-making processes of diverse responses to climate change, based on the participants' narrative accounts.

The notion of abilities is focal as it helps the understanding of the diversity in responses to climate change and allows the study to go beyond assumptions of individual egoism or apathy. In dialogue with the concepts of **denial** and **care** (presented later in this chapter), I interpret the participants' stories about responses in chapter 7.

The analytical relevance of response-abilities is two-fold. The first relates to the challenges of responding that can be explored in the Copenhageners' small stories. How are response-abilities talked about? The concern about climate change is widespread in the Danish population, and yet studies have concluded that many people have difficulty knowing how to respond. Interpreting the stories about everyday life responses allows for an exploration of ambivalences, challenges and dilemmas that occur in coping with disturbing knowledge about or experiences with climate change. How might we learn from these accounts? This section explores the narrative accounts beyond the dichotomic understanding of either responding or not, in order to unfold the distinctions in types of responses. For this, I will make use of the concepts of the information deficit model, denial and care as well as the ecological and sociological imagination (I elaborate on these below). The second section relates to the challenges and potentials for change that can

be interpreted in these stories. The stories about responses differ, from accounts of despair and hopelessness when not knowing what to do or being uncertain about the impact of individual action, to accounts of optimism and hope, from feeling a commitment to others or sensing a change in the public debate. What is particularly interesting here is how these small stories from the young Copenhageners can be used to point to challenges relating to everyday life responses to the global issue.

(Socially organised) denial: Literal, interpretive and implicatory

Inspired by Norgaard's (2011) conclusions from her fieldwork study in Norway, I make use of the concept **denial**. I use the concept in both analytical chapters, but I present it here in the framework, as the concept is related to both response-abilities and care.

In daily conversation, denial is often used to describe someone deliberately turning the blind eye to something and rejecting the existence of a phenomenon, an event or a situation. In relation to climate change, this would encompass rejecting the existence of climate change or arguing that changes in temperature were merely fluctuations of natural processes. If one understands the term denial in that way, it might be surprising to read that I make use of this term in this context, when I have also stated that the majority of Danes consider climate change to be a serious problem. As opposed to for instance in the United States of America, where so-called climate scepticism is widespread and among the highest in the world (Norgaard 2011; Urry 2011), most Danes and Copenhageners consider climate change to be a phenomenon to be concerned about (Concito 2020; Gundelach, Hauge, and Nørregård-Nielsen 2012). When I include this concept in the analysis after all, it is because of the sociological nuances of the concept.

I draw on works of Kari Marie Norgaard and Stanley Cohen, who have engaged sociologically in the concept of denial. Norgaard's use of the concept is based on sociologist Stanley Cohen's tripartition of forms of denial: Literal, interpretive and implicatory (Cohen 2001). Cohen (2001) has written about denial, ranging from denial in individuals' private sphere to how the denial of organised atrocities, such as genocide and torture, can be understood. Norgaard (2011) has transferred Cohen's three kinds of denial to the context of climate change. Below I present Cohen's three variations of denial.

The first variation, **literal denial**, refers to the rejection of facts or knowledge, exemplified by the statement: "It did not happen" (Cohen 2001). The variant resonates with the widespread understanding of the word that I presented above. Here, denial is about conscious or unconscious refusal of facts or knowledge (Cohen 2001).

The second, **interpretative denial**, means that facts are not denied, but a different meaning is ascribed. It also covers when the significance of facts is given different interpretations such as understatements or word changing. For instance when someone says: "It's not as bad as it seems" or uses euphemisms or technical words to describe a phenomenon (Cohen 2001). Cohen (2001) exemplifies this with the technical military phrasing of 'collateral damage' instead of "killing of civilians". Implicatory denial relates to the process of the denial or minimisation of the implications of a phenomenon (Cohen 2001).

The third variation is **implicatory denial**. What is denied here are the implications of a phenomenon, and this can be exemplified with the question: "What can an ordinary person do?" (Cohen 2001). With implicatory denial, it is not a matter of denying facts or knowledge, but instead the failure of integrating that knowledge into everyday life (Cohen 2001; Norgaard 2011). Cohen adds to the definition of implicatory denial: "Rationalization is another matter when you know what can and should be done, you have the means to do this, and there is no risk. This is not refusal to acknowledge reality, but a denial of its significance or implications" (Cohen 2001, 8). Cohen's latter variation of denial is somewhat similar to **denial of self-involvement** in the sense of self-exclusion: "Denial of self-involvement minimizes the extent to which an environmental dispute is relevant to oneself or one's group" (Opotow and Weiss 2000, 485).

Denial can be dealt with as either an individually or socially understood concept (Cohen 2001). I understand the concept of denial as "… shared, social, collective and organized", rather than individual (Cohen 2001, 9). My use of the concept is sociological in the sense that I interpret the narrative accounts of the Copenhageners as both particular and typical. My focus, then, is on denial as socially organised, which underlines the fact that ideas about normalities are socially constructed:

> "Through a framework of socially organized denial, our view shifts from one in which *understanding* of climate change and *caring* about ecological conditions and our human neighbors are in short supply to one whereby the qualities are acutely present but actively muted in order to protect individual identity and sense of empowerment and to maintain culturally produced conceptions of reality" (Norgaard 2011, 207, original italics).

In this conceptualisation of denial there are similarities to the notion of response-abilities. Further, in this understanding, denial is related to – rather than opposing – human empathy and care, Norgaard argues:

> "I wish to clarify that a key point in labelling the phenomenon of no direct activity in response to climate change as *denial* is to highlight the fact that nonresponse is not a question of greed, inhumanity, or lack of intelligence. Indeed, if we see information on climate change as being *too disturbing* to be fully absorbed or integrated into daily life […] this interpretation is the very opposite of the view that nonresponse stems from inhumanity or greed. Instead, denial can – and I believe should – be understood as testament to our

> human capacity for empathy, compassion, and an underlying sense of moral imperative to respond, even as we fail to do so" (Norgaard 2011, 61, original italics).

With this understanding, denial in relation to climate change is related to the response-abilities of individuals and communities, as Norgaard writes:

> "… an outcome of a world in which time and space have been restructured such that the most intimate details of life from food, clothing, or family vacations are directly yet invisibly linked to the hardships and poverty of people in other parts of the world. Climate denial is a consequence of a world in which boundaries that once existed are collapsing" (Norgaard 2011, 221)

With globalisation processes and ongoing transportation of various products around the globe, even the most mundane of situations has visible links to the inequalities of the world and the consequences that others suffer (Freudendal-Pedersen and Kesselring 2020; Norgaard 2011; Urry 2000, 2011). This can lead to individuals feeling paralysed, and socially organised denial can be a way to protect oneself (Norgaard 2011).

Care

In line with the analytic argument of both-and instead of either-or, I introduce the concept of care to the interpretations of everyday life responses. Like denial, care is seen as an integral part of human social life (Tronto 2017). Care is an interesting analytical perspective. The insufficient public response to the phenomenon has been thought of and attributed to inadequate caring, that people simply don't care (Norgaard 2011; Stoknes 2015). The notion of care has been dealt with by various feminist research and in different contexts than the one of this thesis, through the ethics of care perspective (Moriggi et al. 2020; Tronto 2017). I include the concept here to add a concept to the theoretical framework that enables me to interpret ideas of relationalities and dependencies (Moriggi et al. 2020; Tronto 2017). Joan Tronto argues that care offers an alternative view of the interrelations and interdependency of the world's inhabitants:

> "Care conceptually offers a different ontology from one that begins from rational actors. It starts from the premise that everything exists in relation to other things; it is thus relational and assumes that people, other beings and the environment are interdependent" (Tronto 2017, 32).

Care can be used to highlight relationships between various actors, in that it challenges the idea of individual independence (Tronto 2017). Tronto writes that rather than seeing individuals as alone, "… all individuals constantly work on, through or away from relationships with others. Those others are in different states of providing care and needing

care from them" (Tronto 2017, 32). I make use of the concept in the interpretations of responses. Stanes and Klocker (2016) argue that for young people, caring can look different from the general ideas of acts of care.

Ideas about a public information deficit

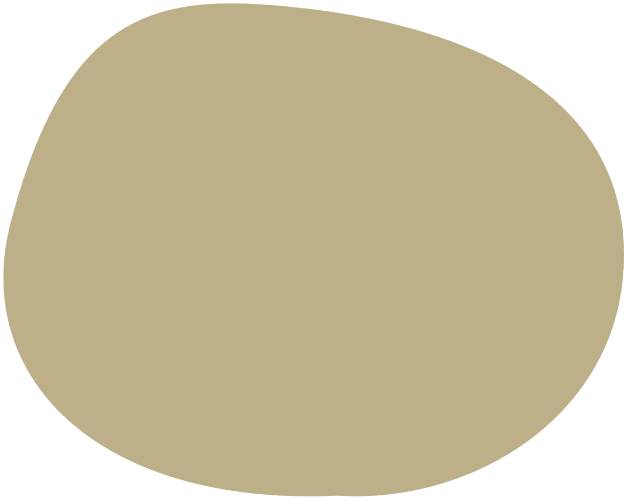
The final concept of the theoretical framework is the information deficit model (Bulkeley 2000; Burgess, Harrison, and Filius 1998). For years, climate change research has focused on providing the public with sufficient information about existing and anticipated climate change, to ensure public response, through what has been termed the **information deficit model** (Bulkeley 2000; Burgess, Harrison, and Filius 1998). As Norgaard writes: "There is a sense that "if people only knew," they would act differently: that is, drive less, "rise up," and put pressure on the government" (Norgaard 2011, 1). However, as scholars have pointed to, the information deficit model is an inadequate explanation for everyday life responses to environmental issues such as climate change (Bulkeley 2000; Burgess, Harrison, and Filius 1998). I make use of this concept in the explorations of small stories about responses in chapter 7.

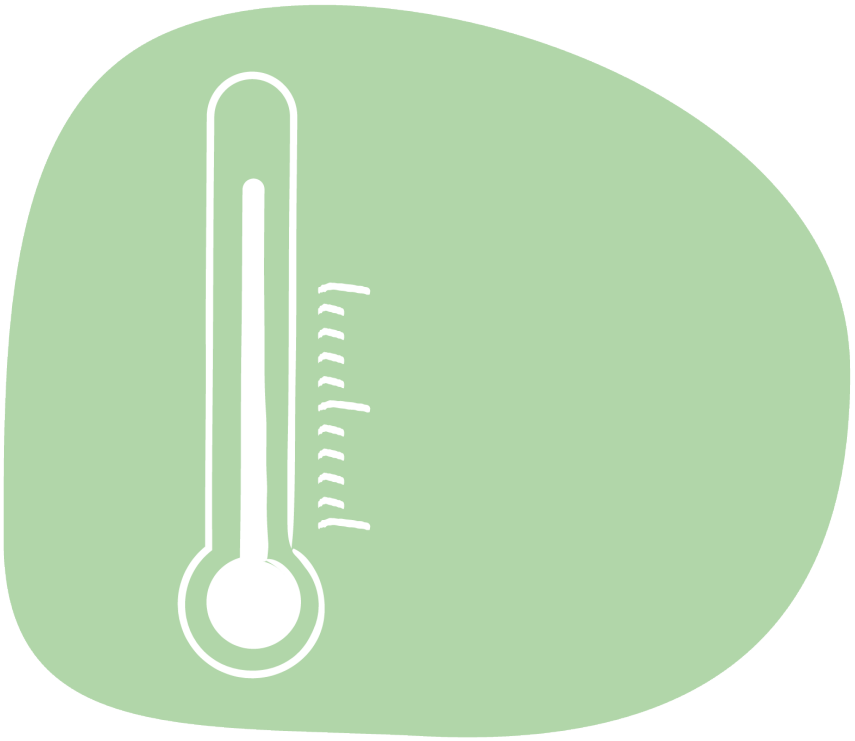
Concluding remarks

In this chapter, I have presented what I have termed the theoretical framework of the thesis. The chapter contains the presentation of the core concepts that I make use of in the following two analytical chapters. Common for the concepts is that they enable me to explore aspects of the small stories. I have presented them briefly here, as I elaborate and make use of them in the following chapters. In addition to these core concepts, I add a few additional concepts along the way in the two analytical chapters. These are less core concepts than the ones in the framework, and therefore I have not added them here.

The eclectic theoretical framework is developed in dialogue with the empirical material, as a result of the abductive research design and openness that I have approached the research with. As such, the theoretical framework has developed through the research process and I have added concepts to the framework that I did not initially intend to, as themes that came up in the interviews and focus groups called for further perspectives.

In the following two chapters, I put the theoretical concepts to use, in the analytical exploration of the young Copenhageners small stories about experiencing and responding to climate change in everyday life.





Chapter 6

Small stories about everyday life experiences

In the previous chapter, I presented how climate change has become an issue that cities respond to and how the City of Copenhagen deals with climate change through the complementary approaches mitigation, adaptation and collaboration. The City's overall staging of the issue in relation to the development of a liveable city can be understood as a staging of climate change as an opportunity as well as a risk. With this staging settled, I now turn to the young Copenhageners narrative accounts about climate change.

The young Copenhageners' small stories about climate change take different forms, ranging from stories about experiencing cloud bursts and a long summer without rain, to stories about responding to the issue through mundane everyday situations such as choosing what to eat and sorting waste. In this chapter I focus on small stories about climate change as it is experienced. By doing so, I answering part of the the sub-question: How do young Copenhageners talk about climate change? I unfold various kinds of lived experiences and the difficulties of knowing for certain what climate change is, presented by the participants.

In the next chapter, I explore how climate change is narrated as a phenomenon to respond to in everyday life. In both chapters, I stitch together quotes from interviews and focus groups with theoretical concepts to develop an analysis that attends to the various kinds of experiences and responses, the uncertainties that the participants expressed and the challenges this points to. Understanding these various ways of talking about climate change as nuances rather than opposites, is a way to analytically recognise that experiences with and responses to global phenomena are related and take multiple forms in daily life. In the following, I present this analytical categorisation in detail.

The analytical categorisation:

Small experience and response stories

My analytical focus is on the social construction of the phenomenon in everyday life. I have developed an analytical categorisation of small stories about **experiences** and **responses**, through which I distinguish between the young Copenhageners' small stories about climate change as experienced in everyday life, either directly or indirectly, and climate change as a phenomenon to respond to in various mundane situations.

With this analytical categorisation, I propose that climate change is not narrated solely as bodily, physical and sensory experiences of, for instance, an unexpected cloud burst or drought. The small stories in this thesis also include accounts of climate change experienced indirectly through various initiatives in the city and accounts about various responses to the issue and the challenges related to responding to global climate change in everyday life. In addition to descriptions of experiences with climate change, stories about various ways of taking action in everyday life took up much space in the participants' small stories about climate change. I argue that both of these aspects hold important perspectives about how different experiences, phenomena and situations are linked to the larger problem of climate change, when they are talked about in everyday life. The categorisation reflects my argument that climate change in everyday life must be studied through conceptualisations of both-and rather than either-or distinctions, and that the two analytical categories are complementary. As this is an analytical categorisation of everyday life talk about climate change, I include short extracts from the dialogues I had with the young Copenhageners. As such, the quotes are small patches from the interviews and focus groups and do not reflect the entanglement between the two kinds of small stories.

The differences between the two analytical categories can be understood as:

Small stories about experiences…	**Small stories about responses…**
are about noticing something being different	are about whether to do things differently
concern the question: How is global climate change experienced in a situated everyday life?	concern the question: How are everyday life choices and activities related to climate change?
relate information and previous experiences	relate information to various mundane situations
relate to the past, present and possible futures	relate to impacts on possible futures

Figure 7: Differences between small stories about experiences and small stories about responses

Small stories about near and distant experiences

The analysis of this chapter is focused on how the participants talked about climate change as something they experience, and how we can understand this as an important contribution to climate change research. My main argument of the chapter is that climate change is talked about as something experienced in various ways. As mentioned, many social scientific studies on climate change have described the issue as spatially and temporally distant in everyday life in countries in the Global North (Beck 2009; Giddens 2011; Gundelach, Hauge, and Nørregård-Nielsen 2012; Nilsen 1999; Norgaard 2011; Stoknes 2015). However, most of the participants in this research talked about climate change as a phenomenon that is both near and distant in their everyday life. In keeping with my wording from the review of sociological discussions and development about the issue, climate change is talked about as a risk, the anticipation of future events, as well as an existing condition. In the participants' small stories, climate change appears not only as a phenomenon distant in time and space, but also as a near phenomenon, changes that they can feel and sense. Through the chapter, I argue that this double role of climate change is important to explore, as it can contribute with nuances to discussions in urban planning and research, about the kind of issue climate change is and why it is difficult to respond to.

According to the young Copenhageners' accounts, climate change cannot be understood as invisible or non-existent in their everyday life. Rather, the issue is situated in the context of everyday life in which human beings try to make sense of the issue in various ways. With this, climate change must be understood as a condition in everyday life. This differs from the prior understandings that it was not experienced directly, but through the media or expert statements (Eskjær and Sørensen 2014; Giddens 2011; Nilsen 1999; Stoknes 2015). But, as Beck (2016) argued, climate change has already altered not only the physical surroundings, but our understandings of the world. Abbott and Wilson (2015) have likewise pointed out that, by now, climate change is experienced in a diverse array of ways around the world. The participants in this research not only talked about future scenarios, when they talked about climate change. Their narrative accounts were also about how they reflect on experienced changes in their daily lives, from direct or sensory and physical experiences of warmer temperatures to indirect experiences with initiatives made to mitigate climate change or adapt the city to the issue. Lived experiences of climate change are relational and entwined with other experiences (Abbott and Wilson 2015; Bee, Rice, and Trauger 2015). The analysis of such lived experiences must take into account that everyday life is lived in a specific context and include broader aspects, because the issue is entangled with other everyday experiences (Abbott and Wilson 2015).

I focus on the participants' verbal representations of their lived experiences. It is the exploration and interpretation of these narrative accounts and reflections that are the focus of this chapter, as I understand reflections about and verbalisations of the experiences as part of the process of meaning-making (Clandinin 2016). Talking is not the only human meaning-making process, but it is the analytical perspective of this inquiry. The chapter does not present an exhaustive presentation of all lived experiences with climate change, as there are reflections, sensory aspects and actions that are not verbalised and possibly reflections that the participants have not verbalised in the interviews and focus groups. Further, as everyday life small stories are continuously unfolding rather than static, the stories that the participants tell after they participated in this research, will probably have developed.

The narrative accounts of lived experiences are dynamic and evolve over time as new experiences are encountered (Abbott and Wilson 2015). This is apparent in the interviews and the focus groups, as the participants referred to recent events or public discussions, when they talked about their experiences. In the first focus group, the participants related several discussions about the climate to the (at the time) recent first national COVID-19 lockdown, and in the second focus group, the participants discussed possible consequences of single-use face masks, when they discussed climate change. These are distinct examples of how current events and experiences inform both individual and collective lived experiences. This points towards Abbott and Wilson's (2015) emphasis on local knowledge and the temporal dimension of lived experiences, how these are framed and evolve through engagement with broader circumstances, and the idea of climate change experiences as collectively constructed and organised. Some of the associations presented here are thus probably less identifiable and other symbolic associations clearer than they would be in other social, cultural, temporal or geographical contexts.

The knowledge that the participants referred to seems to be a blend of expert knowledge, their knowledge about their local environment, previous experiences and social norms. Their descriptions included both specific situations and reflections about surrounding aspects such as social relations, sensory experiences, personal preferences, reflections about the future, public discourse, descriptions of the necessity of doing certain things, economic or material consequences and information about climate change.

In the following, I briefly outline how the everyday life use of the term climate change differs from the scientific use, as the definition of the term is mentioned as rather diffuse. I then go on to show and analyse how the participants talked about the term.

Climate change as a diffuse umbrella term

Defining climate change is different in an everyday life context than in a scientific one. The UNFCC's (1992) definition of climate change that I presented in Chapter 1 provides a technical and scientifically agreed upon definition of changes in Earth's climate. However, how climate change is talked about and discussed in daily life is more diffuse. This was expressed in the participants' answers when I asked them what they understood by the term. Their answers span between descriptions of specific consequences of climate change to reflections about human impact and thoughts about possible futures:

> "I understand something about temperatures that are rising, water levels that are increasing, climate refugees, areas of the Earth where you can no longer live because it becomes too hot or it is flooded. Yes. Actually, I connect it to, in some way, if I think about it a lot, a fear for what will happen. I don't feel afraid all the time. But I do think that climate change is scary to think of" (Rikke).

> "I think about temperature increases and that we destroy the balance, that all of our Earth rests on. And that the outcome is something we don't … There are so many variables, we cannot predict what it will result in and how quickly it will happen. So, it is like a big, black cloud in the horizon, and you don't know what will happen, when it is upon us" (Anne).

Common for these two accounts is that tangible phenomena such as increasing temperatures and rising water levels are presented in relation to the thoughts about the unknown future consequences and fears connected to this. Most of the participants talked about climate change as anthropogenic. While Anne talked about destroying the balance of the Earth, Nanna used the wording "we are breaking down our planet":

> "Well, I think that what I understand about it is that it is a sort of concept that covers extremely many, really a lot of diverse things. And that people use it in extremely diverse ways, so that it is not necessarily the same thing you talk about. But I think that for me, climate change is the phenomenon, that we are breaking down our … Well, that we have a consumption so great, that we are breaking down our planet. And so, you see that in some places, the temperatures are increasing and other places they are decreasing, right? And that wind, weather and temperature are sort of changing. And that we human beings and consumers are pressuring that change further" (Nanna).

In the quotes above, climate change is talked about as an umbrella term covering both specific and abstract problems. However, all three quotes suggest a reflectivity about the connections between human beings and changes in the climate, what we may term an **ecological imagination** (Norgaard 2018), an ability to imagine the relatedness between human beings and the planet. This ecological imagination is common for most of the participants, although uncertainties about the actual linkages were often expressed. I return to these uncertainties at the end of this chapter and in the following chapter.

Climate change, environment, global warming or a climate crisis?

As I have outlined in Chapter 3, there has been a development in how the consequences of human activities have been framed, from the environmental impact of pollution, to discussions about holes in the ozone layer, global warming and climate change (e.g.; Carson 2000; Giddens 2011; Nilsen 1999; Urry 2011). These concepts have scientifically determined distinctions, but these are less clear in the everyday life context, and there was a widespread diffusion expressed between the terms **environment** and **climate** or **climate change**. In the first focus group, Anne defined the environment as a local phenomenon that Danes can protect and the climate as a global phenomenon that demands other countries to take part as well. Unfortunately, neither I nor any of the other participants picked up on this distinction during the focus group, but continued the discussion in another direction. In Chapter 7, I discuss the participants' accounts about the role of Denmark in climate change responses. In the second focus group, I asked the participants to describe their use of the terms **environment** and climate change:

> Sarah: "They are words that, for me, that merge a little".
>
> Nanna: "Mmh"
>
> Sarah: "I use the words to vary my language a little, and because I don't really understand what the different words really mean. It becomes part of the same green kettle of fish, that you can talk about […] I think that **climate** is on the grand scheme and, yeah, extreme weather and carbon dioxide. And to me, **nature** is about the woods and water, what is green. And **environment** I have difficulty saying what I think about".
>
> Nanna: "I totally agree. I also think that when we talk about it here, I talk about them interchangeably […] I think that there is a closer connection between **climate** and **environment**, because they both deal with something on an abstract level. I agree with Sarah, that **nature** is more about what I can go out and take hold of. But if you look at it, I recognise that it is mixed […] Birgitte, you must have the philosopher's stone?".
>
> Birgitte: "I really don't think that I have anything to add. I completely agree, sadly" [Everyone laughs, ed.].

The terms environment and climate change are described as large and intangible concepts, and the participants mention nature as phenomena that is more tangible. What is interesting is that the participants mentioned nature, although I asked about the terms environment and climate change. Gundelach and colleagues (2012) describe a similar diffusion of the various concepts in their study about the presence of climate change in everyday life. They found that, for most of the young Danes, the three concepts merged, and that out of the three, **nature** was a tangible concept attached to specific places or

experiences, whereas **environment** and **climate change** were considered intangible concepts that were difficult to talk about (Gundelach, Hauge, and Nørregård-Nielsen 2012). Gundelach and colleagues (2012) write that this merging of the concepts in everyday life might reflect the relatedness between the phenomena in the real world.

In everyday life, the scientifically agreed upon definitions and distinctions have little resonance, and the issue is talked about in relation to a wide range of events and phenomena:

> "I think it is difficult to answer, because it goes round and round in my head, sort of like a catalogue of all of the things that have anything to do with it. Also, you said climate change, but I have already interpreted it as climate and environment and recycling and so, you know. And that is stuff that is thrown into a kind of funnel of, you know, all sorts of things" (Nanna).

In addition to the diffusion between the concepts of environment, nature and climate change, there were other terms that were mentioned briefly in relation to the issue, although only by a few participants. These were **global warming** (Anne; Birgitte) and **climate crisis** (Jacob; Kamilla). Kamilla mentioned a climate crisis, but also talked about the **environment**:

> "What I understand by the term climate change? I see it as a climate crisis, actually, because I might be a little more pessimistic about it compared to what many others are […] I am one of those who are pretty despairing on behalf of the environment. I'm like: "This is not going well, you guys. What should we do about it?"-ish" (Kamilla).

I have not studied the participants' different usages of these concepts in detail, but it is interesting that only two of the participants used the term climate crisis. We might understand this in relation to how climate change has been staged in Copenhagen as an opportunity. The framing of climatic changes in relation to urban development and liveability may play a role for the ways the issue is narrated in everyday life. However, the participants' use of the term climate change may also reflect that this is the term I used in the interviews and focus groups. It is not possible for me to conclude anything from this, as I did not address this distinction with the participants.

In this everyday life context, the issue goes by many names, from nature, environment and global warming to climate change and climate crisis. Based on the participants' accounts, there is no reason to think that the diffuse character of the issue implies that the participants do not worry about the consequences. Similar for the study done by Gundelach and his colleagues (2012) and this one is that both the young Danes and the young Copenhageners expressed worry about climate change and a wish to do something about the issue. A significant difference between that study and mine is that the young Copenhageners in this research also talked about climate change as experienced, and not only

as a distant and intangible phenomenon, as was the case in the other study (Gundelach, Hauge, and Nørregård-Nielsen 2012). Climate change works as an umbrella term used both in relation to specific weather events and uncertain possible future consequences.

Climate change as experienced

When I asked Ulrikke and Victoria whether they had experienced climate change themselves, Ulrikke replied "Why, yes we have. We live here", as a matter of fact. And although often mentioned as abstract and difficult to comprehend, the young Copenhageners all talked about climate change as existing and particularly talked about it as a phenomenon caused by human activity. It was not always that the participants expressed certainty like Ulrikke, but none of the participants expressed unambiguous denial of the existence of anthropogenic climatic changes, what Cohen (2001) would call **literal denial**, the denial of the existence of the phenomenon, and what Urry (2011) perhaps would have described as **scepticism**, the understanding that there are too many "unknown unknowns" to be certain that climate change is happening. Rather, the young Copenhageners talked about climate change as a phenomenon that exists and causes worry. At the end of this chapter, I explore the various uncertainties expressed about the issue and how these can be understood as examples of **interpretative** or **implicatory denial** (Cohen 2001). I briefly mention the term denial here, as it is important to stress that all of the young Copenhageners accepted the premise of climate change. This might be different had I interviewed people living in other parts of the world. For instance, Norgaard (2011) writes that literal denial and scepticism towards climate change is widespread in the US, helped along by politicians and large campaigns.

That the young Copenhageners did not express literal denial or scepticism about anthropogenic climate change should be understood in relation to the many accounts about everyday life responses to the issue. I assume that reflections about how to respond to climate change in everyday life would not be as present in the participants' accounts, if they did not acknowledge human influence on Earth's changing climate.

The young Copenhageners' small stories about experiences with climate change can be divided into two sub-categories: Climate change as experienced in the city and as changes in the seasons and the weather. First, I will focus on accounts about climate change experiences in the city.

Climate change as experienced in the city

The first sub-category "Climate change narrated as experienced" means that it is not solely an intangible phenomenon, but also noticed, sensed or experienced through particular weather events, situations and changes in the city, all in a local context. As I have outlined in Chapter 3, the City of Copenhagen has paid much attention to climate change through political visions and strategies as well as initiatives that interfere with the everyday lives of the Copenhageners. In the interviews, most of the participants referred to municipal climate-related projects or visions, that they had heard of and what they thought of them. Patsy Healey (2010) writes that citizens increasingly know about what is happening in the city and the political processes in the urban administration. It is not my impressions that the young Copenhageners took part in local movements or were members of local organisations working to change and develop the city. Nevertheless, most of them had made up their minds about various discussions and projects in their neighbourhood and in the city in general or had noticed mitigation or adaptation projects in the city.

Several of the participants living in Nørrebro mentioned a project that entails a possible opening of an enclosed stream, Ladegårdsåen, and the demolition of a motorway bridge, Bispeengbuen, running on the outer parts of the Nørrebro neighbourhood (e.g., Birgitte; Frederik; Lasse). The project, initially initiated by local citizens, has gained a lot of attention in both the public and in political debates, and the project encompasses two major discussions in Copenhagen these years: Reduction of cars in the city and added value in climate change-related project (City of Copenhagen 2021).

Likewise, several participants mentioned that they had noticed things that were thought as an added value, but did not seem to make sense in adaptation projects. For instance, during the walk-along Frederik and Kamilla both criticised a newly built basketball cage in the Nørrebro neighbourhood for not being thought through, and Frederik pointed out that: "So you have made a basketball court, that tilts towards the middle. That means, that you have four basketball nets with potentially a giant puddle in the middle and you can't use any of the four nets" (Frederik). In addition, he pointed out that the round shape of the basketball cage only allowed for two of the four nets to be used at a time, if two teams are playing, and continued: "It's an example of: "Okay, now we'll make something smart, cool and good" and then the people making it, have never ever played basketball, right? Or at least they don't know what it is, it seems" (Frederik). This serves as an example of how the young Copenhageners make demands for their municipality to make smart decisions when combining different projects in the wish of added value in adaptation projects and use of urban spaces in general. In general these young Copenhageners are knowledgeable about the city's development and what kinds of discussions are

going on in the neighbourhood. These aspects came up during the walk-along part of the individual interviews (Kusenbach 2003). In general, walking came up in several interviews as an important part of the participants' engagements in the city or their neighbourhood. Just like talking is considered an essential part of human lives, walking is considered the most basic form of movement and a fundamental part of the everyday engagement in and constructing of place (Certeau 1984; Degen and Rose 2012; Jensen 2013; Lee and Ingold 2006). Some of the young Copenhageners told me how they used walking in their daily lives to collect their thoughts, have a break, change their mood or keep track of life in the city and how the trees grow (Christina; Ditte; Emma; Isabella; Kamilla; Morten; Peter; Sarah). In general, the young Copenhageners talked about walking as an integral part of their daily life, both as leisure and mode of movement. Frederik, who was on parental leave at the time of the interview, said that walking with the pram around the city had become his primary mode of moving around the city, and that he and his partner had arranged their life based on walkable and cyclable distances to work and friends. Morten said that he enjoyed walking the four-five kilometres from work to his home, while listening to music, talking on the phone or stopping for a beer: "I love to use the city like that, just wander around and look at people" (Morten). This kind of walking resembles Walther Benjamin's classic figure of the flaneur, a drifter enjoying the freedom and culture in the city (Jensen 2013). The flaneur figure has later been criticised for not including how this kind of freedom and anonymity is dependent on gender, body and race, as walking through the city without receiving (unwanted) attention is not granted for all (Beebeejaun 2017).

In Nordhavn, a couple of the participants talked about climate-related features in their buildings developed, like green roofs and the use of sea water to flush toilets (e.g., Olivia; Peter). Olivia explicitly mentioned what she found environmental or sustainability initiatives as part of what she appreciated about living in the neighbourhood:

> "… since we moved out here, I feel that this is more what I need. It's quieter, clear, there are no cars, the air is cleaner, it's right next to the water and then there are all of these environmental or sustainability initiatives, that are super cool, I think […] If there isn't a roof terrace, there is something green on the roofs because it can absorb rain water, to prevent flooding. And in our toilet, it's salt water that they take from the sea, so the groundwater isn't used. So those things just give some extra value to living in a place like this. And you want to pay some more for it, I think. If you can afford it" (Olivia).

This quote points to two interesting aspects. First, that climate change-related initiatives are talked about as part of what makes a good place to live, although the things that Olivia mentioned were not necessarily visible or noticeable in everyday life. The second is the

increasing housing prices in the newly built neighbourhoods like Nordhavn. This can be understood as an example of the **carbon gentrification** in which the citizen's possibilities of leading a climate-friendly life depends on income, education and access because of the attractiveness of neighbourhoods that are considered "green" or "low-carbon" (Long and Rice 2019; Rice et al. 2020).

Peter expressed that he was uncomprehending of the lack of nature and green elements planned in the newly built neighbourhood:

> "I think that it's a shame that they built a new area and didn't incorporate more nature, like trees and bushes and lawns and green areas, than what they have done so far. They think about a lot of other things, like our toilets flush with seawater, for example, right? Or there has to be something green on the roofs or there must be a certain circulation in the building, air that is reused, right? […] It's really ambitious in terms of building materials and general demands. So they thought about it a lot, so it's a shame that they didn't incorporate any external signifiers to express that this is a climate-friendly or environmentally aware area" (Peter).

Interestingly, the invisibility of the climate-friendly or sustainable initiatives in Nordhavn, which have been guiding principles from the initial development of the new neighbourhood (City of Copenhagen 2018) came up in the interview with Henrik, who said:

> "There isn't anything, where I would think that it was a climate-friendly solution, that is chosen here […] At least I am not of the perception, that Nordhavn was built with a climate-friendly frame of mind. It's not that it's not climate friendly, but it's not that there are solutions that make one think that it's does something good for the climate. At least that's not the perception I get from living here" (Henrik).

From these quotes, I cannot know for sure what the young Copenhageners in general consider as climate friendly and not. However, it is interesting that the invisibility of climate-related initiatives in the newly built neighbourhood is brought up from these two different perspectives. Thinking back on the City of Copenhagen's strategy of developing adaptation projects that are made to fit into the characteristics of the neighbourhood, there are more aspects to explore about how the layout and visibility of adaptation and mitigation projects affect the Copenhageners' understandings of them. This is outside the scope of this thesis, but could form the basis of future research on the planning and implementation of adaptation and mitigation projects in cities.

Some of the participants' photos had to do with some climate-related experiences. Some had to do with climate-related urban planning, while others related to experiences in the city that the participants linked to climate change. Frederik had taken a photo from the basement of his building (the photo on the following page) and said about it:

"This photo is taken in our wash-house in the basement which […] was supposed to be dry, so you could dry your clothes in the basement […] And when I looked through the photos, I thought it was quite fun, because there you see how much of the wall is peeling off because of the dampness. And it is actually the foundation of the house, that I live in. I mean nothing happens, it's fine as such, but it is sort of … I mean, it is crumbling from below. And it is not that this is the only basement looking like this in this area. So the whole neighbourhood is more or less porous beneath our feet. And I mean. At the same time they are building balconies and adding extra floors on top, right? So they are putting more weight on top of it. And I mean. It's crumbling below! […] the entire neighbourhood is crumbling beneath us. Luckily they are building Ladegårdsåen to drain the water" (Frederik).

Photo 2: Photo from a basement in Nørrebro (photo by participant).

Here, the cracks and water damages in the wall that many others might overlook, were related to the consequences of climate change such as a rising ground water and possible consequences for the neighbourhood. At other times, the photos were more directly linked to initiatives from the City of Copenhagen. Rikke showed me a photo of the waste shed in her housing cooperative (the photo on the next page). When she talked about the photo, she related it to the City of Copenhagen's waste separation initiatives as well as broader themes, such as stories she had heard and developments she had noticed:

> "…I have taken a photo of our waste shed because I thought that the theme was also something about the climate. And I thought that this shows pretty well the awareness there is or how the municipality works with it too, the waste sorting. […] But then you hear something about plastic, that it is bad to sort it anyway. But I think that when they inform about it, the citizens become aware of it. But one could probably sort much more than one does now. But I actually think that the organic bin[31] shows the development that has been in only fairly few years, in the climate field. People were almost like shaking their heads: "What are we supposed to do with this green bin here?" and "What? Is the municipality palming that off on us?" And then it was actually really well received. And the same is happening with vegetarians. At first, when someone suggested a meat-free day: "What on earth?" And now, most work places have their vegetarian Wednesday. Fish Wednesday has become Vegetarian Wednesday. And even the most beef eating people still come" (Rikke).

Photo 3: A waste shed in Nørrebro (photo by participant).

[31] 'Biospand' in Danish. The bucket used to collect organic household waste in Copenhagen.

The photo which offhand only shows various waste containers in a waste shed, is related to the development of how people talk about sorting waste, the insecurities following stories about sorting waste and a change in food servings at work places.

Kamilla had also taken a photo from the waste shed in her housing cooperative (on the next page). What was particularly interesting in what Kamilla said about the photo was that she had reflected on different experiences in the two different neighbourhoods that she had lived in and the different kinds of people living in the two. The following quote adds to the understanding of the social aspect of the dialectic processes in the city, that life in the city is not solely staged from above from the municipality and from below by individuals (Jensen 2013). Instead, the actions of the people living in the city and the social interactions and norms can be understood as equally important as the City's plans:

> "I have taken a photo of my bulky waste space, because it is one of the things that … When I moved here from Sydhavnen[32]. I mean, there is gold in my bulky waste space. Really! People throw away the sickest things. In this photo you can see fully functional IKEA furniture, that are perfectly all right. There is a bicycle helmet, that was also brand new. I could see that it had not been used. It is a bicycle helmet for a little girl. And I couldn't get it all in the one photo, but that's the thing about this container. There is always these fully functioning things. There was a TV. I have a TV, but if I didn't, I could have gone down there. There is just always gold in that bulky waste space. I mean, when I lived in Sydhavnen, it was downright waste in that space. You can just see that people have a different set of resources here. They can throw out almost new, or so it looks, furniture. You can say that of course it is nice that they place it in the bulky waste space, so there is a chance that others can take it. I just don't think that that is the case here. I mean, I'm often down there raiding the bulky waste, because I don't have any money. But a lot of my neighbours, they have money themselves so they… They're the ones who throw these things away. Something funny is on the other hand, that people are crazily absorbed in sorting waste, where I live. I mean, where I lived in Sydhavnen, I almost felt that I was the only one who sorted the waste (laughs, ed.). Everything was just tossed in the residual waste. I think that we were a handful of people, who used that biowaste thing, for instance. Whereas here. I mean, everything is just dead straight, everything is completely sorted and people are crazy good at sorting their waste. I almost feel like you would feel 'sorting-waste-shame', if you didn't do it where I live now. So, it is just a huge contrast, people throwing away brand new furniture, but are crazily absorbed in throwing cans in the right bin and so on. Which is the complete opposite of where I lived before" (Kamilla).

She elaborated on the contrast and differences between the two neighbourhoods by:

[32]Another Copenhagen neighbourhood

"If you can afford to throw new furniture in the bulky waste space, you also have surplus of resources to sort your waste. You often have that in this neighbourhood, or a lot of people simply have a surplus of mental resources to place the cans in the right bins, but on the other hand it is also pretty awesome to get new furniture, when we have the economic surplus anyway" (Kamilla).

Photo 4: Photo of waste shed in Nørrebro (photo by participant)

Kamilla pointed to an important aspect, namely the complexities of social norms, various actions taken by different people and a paradox of dealing with sustainability in everyday life. I return to analyse the challenges of everyday life response-abilities in chapter 7.

The quotes above also show what has been termed "the ghost of the picture" (Crang 2010; Oldrup and Carstensen 2012). These so-called ghosts are the invisible or emotional aspects that are not captured in the photo. In their absence, they emphasise the partiality of photographs and that the photographers' intentions with the photo can differ from what a viewer can interpret from it (Crang 2010; Oldrup and Carstensen 2012). If I had only seen Frederik's photo from the basement, I would not have known about the awareness of climate change, that the photo symbolised. Likewise, the two photos from the waste sheds do not in themselves tell stories about the reception of different waste sorting units that the municipality have implemented. By combining participant-produced photos and the interview, I was able to hear in detail about different perspectives in how the young Copenhageners related climate change to experiences in their daily lives.

The last example of the young Copenhageners' mentioning of municipal initiatives has to do with green mobility. Sarah showed the photo on the next page and said about it:

> "The third photo, I have taken, is from the intersection, where the green path crosses Rantzausgade […] because I think that that intersection is really annoying, because it's really difficult to bike here. Turning here is difficult [points at the photo]. But the green path is really fantastic, because it sort of connects the city across. And it's nice that you can bike without thinking about cars and things like that. So the actual path is very smart, but I just think that they have solved it pretty badly. So it's not to sound ungrateful, but it is a little annoying. And when I've talked to people, it's also something that they mention. Perhaps it's just my social circle, but we often talk about it" (Sarah).

Photo 5: Photo of intersection in Nørrebro (photo by participant).

The green path is part of an infrastructural network of bicycle paths aimed at making safe and attractive bike paths separated from other traffic in order to make cycling an attractive mode of transportation and increase the number of trips made by bikes (City of Copenhagen 2009b, 2020b). Although the quote from Sarah does not directly concern climate change, I have included it here, because it relates to the City of Copenhagen's green mobility mitigation initiatives. What is interesting here is that it is the missing link in an otherwise positively described infrastructural connection that is highlighted, and that Sarah describes that she and her friends talk about the difficulties in crossing that particular intersection.

To sum up, the participants talked about various experiences in the city and the neighbourhood when asked about climate change. These small experience stories can be understood as examples of how the issue is talked about as various experiences in the local neighbourhood and in the city. In addition, the young Copenhageners were aware of, related to and expressed opinions about the City of Copenhagen's climate-related initiatives and strategies. These experiences are a kind of **small experiences stories** told by the participants. In the following I explore the participants' small stories about experiences with changes in the weather and seasons.

Climate change as changes in seasons and the weather

> "Some of these summer nights that have been so hot, make me think. It is not natural that you can sit here and eat dinner at Blaaregn[33], and then it really feels as if the Greek tavern is located in Greece. It is such a summer night that just … It is more the sort of climate of the Mediterranean Sea, than a Danish summer climate. So even though it is lovely, and you sit in the sun, and you can just sit here and enjoy it, it is also simply a worry in the back of one's mind, that is it not supposed to be like this. If we want a Greek tavern feel, then we should go to Greece" (Anne).

> "I inevitably think about what we understand as weather phenomena and changes in weather phenomena. An extreme version of weather phenomena. That it rains more, and that it gets warmer, that I have to relate to it being warmer to be in Rantzausgade in the summer, that there will be these extreme phenomena. Will water get into the apartment, that I live in? Will something happen?" (Gustav).

In the participants' accounts, climate change was often linked to local experiences with changes in the seasons and the weather. Experiencing increased temperatures and changes in the local weather seemed to raise an awareness and an attention to something being different. Drawing on her previous experience with the temperatures of a Danish summer, Anne noted that some summer nights fit a warmer climate than the Scandinavian one. The joy of the warm temperatures enabling dining outside in Copenhagen is accompanied by an awareness and concern of the change. Similarly, Gustav mentioned possible changes in the neighbourhood and the potential related problems that he might face, in the case of warmer temperatures and weather-related water damage in his home. In both of the quotes, the intensification of known weather phenomena, such as higher temperatures during summer and intensification of weather phenomena such as rain, are narrated in relation to previous experiences in the local context and anticipation for the future. As Abbott and Wilson (2015) argue, human beings draw on past experiences and tacit knowledge to compare and make sense of experiences. Here, changes in the weather are narrated as events that are noticed and linked to knowledge about climate change. If we understand that people engage with and live in the weather, as Vannini and Austin (2020) argue, weather is a condition for everyday life, rather than a passive backdrop (Vannini et al. 2012). Changes in the weather are tangible when they contrast the expected (Neimanis and Walker 2014). Changes in temperature can thus be understood as a small interruption or **displacement** that challenges the everyday life taken-for-grantedness of

[33] Blaaregn Taverna, a local Greek-inspired restaurant in Nørrebro.

what the weather or the seasons are expected to be, based on previous experiences (Bech-Jørgensen 1994).

Experiences with changes in local weather are the most common and can be understood as the most direct kind of lived experiences with climate change, in the sense that these are physical or sensory experiences with changes in the weather or seasons, such as increased temperatures, rain, drought and an absence of snow. The weather has been termed the present manifestation of the climate (Strauss and Orlove 2003b), and the weather appears as a medium through which climate change is often experienced by the participants. By exploring the associations with climate change that the participants present, I want to show how we can understand these experiences as important, as they involve attentiveness to local everyday life. Changes in the climate are sometimes narrated as present in everyday life as changes in the weather and seasons. The associations of weatherly changes are not solely about experiencing a physical phenomenon. As in the two interview quotes above, these bodily or sensory experiences are related to much broader questions about what is taken for granted and what is expected of the future.

The participants in the first focus group also discussed how they described tangible experiences with extreme or unusual weather events, climate change and uncertain futures. The following discussion is from the introduction exercise, where the participants discussed words that they associated with climate change:

> Anne: "I wrote extreme weather […] Two years ago [in 2018, ed.] we had a three month long period with a drought, where we didn't get any rain. And this winter there was a 1-in-100 year incident with historical floods. So I think that we have to prepare ourselves and make sure our urban spaces must are well equipped for these extreme fluctuations in the weather, and that we must too".
>
> Ditte: "It looks like people have thought about the most palpable things, what you can see around here. That it is suddenly 20 degrees in April. It wouldn't have been that 15 years ago. It's what we can feel, that we mention. It makes sense, because it's easier to express, because it's something that you have actually experienced, compared to the weakened ozone layer, that you don't really know what means".
>
> Isabella: "I think that climate change is a very large parasol that covers many different aspects that are sometimes pooled together in ways you cannot predict […] I just think that we will see that things will accelerate […] Sometimes climate change can accelerate in directions that we didn't predict. And I also think that that is something that we have to get used to and become aware of. And then there is what we can physically feel on our bodies or we can read about, like all those fires on the west coast of the United States […] these very physical changes on the globe. What social consequences will that have?".

Various weather events were often mentioned, when the participants talked about climate change. In addition, the participants in the first focus group discussed possible acceleration of interrelated processes that they linked to climate change. As Ditte mentioned, they talked about palpable phenomena that they have experienced, as they are easier to discuss. Sometimes these stories were about experiencing smaller changes in the weather, and sometimes they were accounts of drastic changes, like the summer of 2018.

Seasons changing: Stories about an unusual summer in 2018

The summer of 2018 is a particular period that many of the participants mentioned in relation to something that startled them, because they experienced temperatures that they found abnormal for Danish summers. Such experiences can be characterised as "out of place" phenomena that transgress local ideas of what is appropriate (Cresswell 2008). The Danish Meteorological Institute registered the 2018 summer to be the sunniest summer since 1920, the most drought-stricken summer in 99 years and (alongside the summer 1997) the warmest summer since 1874 (Damberg 2018; Danish Meteorological Institute 2019). In the participants' stories, this summer is often narrated as a turning point for understanding climate change as a near phenomenon.

Several participants expressed an attentiveness and worry in relation to this particular summer that they related to their understanding of how summers in Copenhagen usually are. This, I argue, is an example of how a weather phenomenon experienced locally can function as a **social scare**: "Social scares entail acute episodes of collective fear that accelerate demands in the political (or related) arena" (Ungar 1992, 458). My focus is not so much on the scientific proof of links between the 2018 summer and global changes, but on how the participants talked about their experiences during this period, to explore how we can understand these stories about weather events as part of everyday meaning-making of climate change. The 2018 summer often came up in the interviews:

> "I lived here, well yes, last summer, but I have also been here a lot the last couple of summers when […] heat records have been surpassed and so on. Yes, I remember that it was like a little extra tough. You show up at work, and we don't talk about anything else, and you get home and don't have the strength to do anything. Can you really do anything but lie in your room? Yes, I relate that to climate change" (Gustav) .

> "Well, I feel it in the form of, well the summer, where there wasn't any water and the lawns turned all yellow, a bonfire ban in all of Denmark, that there are greater heavy rains, that there is more water in our systems, cloudbursts, so like that, heat waves around Europe and other places. So, in that sense you experience it of course in relation to, partly also how you should dress in the morning. Totally basic, right? [Laughs, ed.] (Isabella).

These small stories of warmer temperatures and other unusual weather events transgress the specific sensory experience, as they also include how the heat became a conversational topic, the exhaustion that Gustav experienced at the time, knowledge about heat records being exceeded and Isabella's reflections about which clothes to wear. The experiences with the unusually warm summer were talked about as interfering with routinised everyday life activities and as relational to other experiences, as Abbott and Wilson (2015) have also pointed out. As such, the participants did not talk about these experiences as isolated, but rather related them to what they otherwise take for granted in their daily lives.

Peter said that the summer in 2018 was quite intrusive to the Danish society, because so much was affected by the drought and warm temperatures. He mentioned noticing dried out forests, golf lawns and lakes as well as experiencing challenges cooling off buildings. He linked this to the way Danish society is planned for steadier conditions (Peter). These descriptions imply that what is taken for granted such as common-sense understandings about personal energy levels, clothing choices, green lawns and forests and cooling needs were knocked off course by the unusual temperatures that summer. Using Bech-Jørgensen's (1994) terms, these small stories about the 2018 summer reflect what can be understood as a **rupture** that challenges what is taken for granted in daily routines, making the unperceived or unreflective activities noticed and even challenged. In this sense, that unusual summer can be said to have challenged some of the fundamental **matters of course** (Bech-Jørgensen 1994) or **common sense understandings** (Schutz 1971) considered fundamental to everyday life:

> "The repetition of daily, weekly and annual routines: how and when to eat, wash, move, work and play, accumulates over time to consolidate a 'common sense', which is usually shared by those around you, so that these habits become further ingrained through interaction with others" (Edensor, 2007, p. 211).

The participants linked the unusual sensory experiences and the disruptions of what they take for granted to climate change. That the summer was a kind of scare was also mentioned by Christina, who talked about the reflections that the experiences evoked for her:

> "Of course it [climate change, ed.] is also a strong presence, when you see that the weather has some completely savage swings. I thought a lot about that last year, for instance, when it was so hot for a very, very long period of time, right? Of course, I do [think about climate change]. But right there you also see it all palpable, that something is happening with our climate and our environment" (Christina).

Previous experience and knowledge about summers in Denmark in the narrative accounts are essential, as they form part of the basis on which assessments of normality and deviation are made. However, the increased temperatures were also talked about as enjoyable and even necessary in a country like Denmark. We may comprehend this with

a distinction between short-term and long-term reflections of implications. Such a distinction is discernible in the following quote from the interview with Christina, as she expressed both a spontaneous joy of warmth in a Scandinavian country, and reflections about possible connections and consequences:

> "You can say that in many ways it was enjoyable because you, as a Dane, gladly wish for the good weather, and also because it is one of the things we talk about on a basic level, when we get together, perhaps especially with strangers. So, in some ways, I think it was enjoyable that it was possible to be outside, which is not always possible, for instance not this year. But it does affect me, because you do know about the underlying factor of having, was it sixty-something summer days in a row? That does something, surely, because there is after all a reason that we get such hot weather on our part of the planet, right?" (Christina).

Olivia mentioned similar contradictive short-term and long-term reflections: A joy of warmer temperatures, alongside unpleasant thoughts about the absence of rain, influencing her ability to enjoy the warmth, when she talked about the summer of 2018:

> "I just remember that it was hot and well… I don't mind heat that much, I actually like it. It was more the drought, that we just didn't get any water […] So I think that it's frightening that these things happen. I think it's harder to enjoy" (Olivia).

These accounts illustrate concurrent presences of the short-term joy of experiencing warmer temperatures and the long-term reflection about the implications of the same temperatures. Common for the two accounts is that the experiences with increased temperatures challenged what they took for granted and understood as normal. The prerequisites for reflexively associating warmer temperatures with climate change, as Christina and Olivia do, is the ability to link specific events with abstract phenomena, a connection that is all but straightforward, because of the complex character of climate change.

This can serve as an example of how increased temperatures are not just matters-of-fact or isolated physical or bodily experiences, but that they imprint meaning of the occurrences, in other words that climate change may have become a condition with frightening implications. The experiences of that summer in 2018 and the extensive visible changes that she experienced made Birgitte reconsider her understanding of climate change:

> "Well, I'm afraid that it is worse than everybody says. And that it will be in our lifetime, that… Well, I think that you can already sense that there are more forest fires. Last summer in this country was completely out of proportion: The Lakes [in Copenhagen, ed.] dried up, like … I have not, in any case, experienced that before. And I am afraid that it is irreversible, and that we can't do enough, quickly enough" (Birgitte).

Such experiences with changes were often associated with climatic changes when a weather phenomenon is considered "out of place" (Cresswell 2008), based on knowledge about climate change and local weather as well as previous weather experiences. These experiences seem to challenge the **ontological security**, the trust in continuity so crucial to everyday life (Giddens 1997; Norgaard 2011). As Norgaard noted about climate change in the small Norwegian town: "Merely thinking about climate change raises a series of questions related to ontological security: What will Norwegian winters be like without snow? What will happen to farms in the community in the next generation?" (Norgaard 2011, 82). Although the young Copenhageners ask different questions about the future, their confidence in the consistency seems challenged by experiences with unexpected weather phenomena or seasonal changes. Such experiences can, then, be interpreted as a challenge to the sense of confidence in knowing one's everyday life and city.

The young Copenhageners did not describe these experiences as an instant threat to their livelihood, but even more important is that these experiences seem to alter their sense of ontological security, from Gustav's specific worries about a flood in his apartment to Birgitte's indefinite concern for what will happen, when it will happen and how bad it will be. In this sense, experiences with weather changes are talked about as related to uncertain futures. It is not that the participants talked about their lives as dramatically changed after experiencing an unusual or extreme weather phenomenon, but rather that it provoked anxious thoughts about what the future will be like. Sometimes these thoughts concerned an anxiousness in relation to the uncertain futures for their children:

> "… we're facing an ecological collapse. I sometimes worry that I have even brought children into a world, where they will face, well, I don't even know what. You can't really imagine how bad it will be. It's a reality. We saw last year, that it was the hottest summer ever […] The other day, for instance, my daughter said: "When I grow up, I want to have three or four children". It gave me a knot in my stomach, because I thought: "Will she even have any children?"" (Anne).

Memories of the warm summer are described as interwoven with unknown future scenarios of an ecological collapse that evoke devastating thoughts and feelings and challenge the sense of security, not just for Anne herself, but for the future possibilities of her children. That the unusually hot summer in 2018 was a realisation of the extent of climate change was also mentioned by Kamilla:

> "That it actually comes so close that we start to feel it and that it's not just, well poor people in other parts of the world, but that we are actually also confronted with it […] I actually think that it was healthy that we got that sort of a wakeup call last summer, where our lawns were all brown and that sort of thing, because then people were sort of: ""Good Lord, it can actually affect us""" (Kamilla).

The wakeup call, as Kamilla puts is, illustrates such a threat to the ontological security, initiated by experiences with changes in the weather that season. To understand how such experiences can alter the sense of ontological security, the understanding of the place one lives is essential. Here, the concept of **sense of place** is helpful: "Sense of place refers to the meanings, both individual and shared, that are associated with a place" (Cresswell 2008, 134). How these experiences with weather phenomena are talked about appear to be formed, in part, by the participants' previous experiences in the neighbourhood, city or country and their understanding of normality in that particular place. It is thus place specific rather than universal (Abbott and Wilson 2015). The warmer temperatures and lack of rain in the summer months of 2018 seem to have made the participants notice peculiarities on different levels, from their own personal energy levels or joy in warmer temperatures to cultural and societal matters about bonfire bans and the infrastructure of cooling systems in buildings. For some of the participants, the sensory experience of something being out of place encouraged linkages to knowledge about great changes in the ecological systems and possible future consequences, that possibly pose a threat to both their lives and others'.
Not all participants, however, expressed this kind of anxiousness linked to the changes, they had experienced. Henrik said about possible changes in his neighbourhood:

> "I don't see that climate change will change something where I live at all. The water level can perhaps rise a little, but it's not that it will be flooded, as I see it anyway. The temperatures will be warmer, surely, but again. We live in Denmark, so it's not that it's bad for us, but it's bad for all the others" (Henrik).

Henrik's scenario of climate change is quite different from the ones presented above. Interestingly, Henrik lived in Nordhavn close to the water front and will possibly, in the event of rising sea levels, experience this close hand. This can be understood as an example of **interpretive denial** (Cohen, 2001), the understanding that climate change will cause damage, but that it will not be that bad in Denmark. With interpretive denial, a reinterpretation helps human beings to define an issue differently: "The elephant on the dining-room table is there, but the state and its allies collude in defining it as something else, something not very significant" (Cohen, 2001, p. 106). In this case, the state and its allies can be understood as the national parliament as well as the City of Copenhagen and other actors who, through the framing of climate change as an opportunity and Denmark and Copenhagen as a green pioneer country and city, respectively, define that climate change, the elephant on the table, will not be as big an issue for Danes as it will for others.

Similar to Henrik's point, Lasse toned down the implications of climate change with rational arguments, by referring to rain as a manageable and perhaps even anticipated issue. Reflecting on the kind of climatic changes that he expects in Denmark, he said:

> "Well in a Danish context it's very much heat and rainfall we are looking at, right? So, I mean… Heat. It won't be that different from what we know. Well, of course … the summer last year was kind of an outlier. Then, I thought it was frightening. But I mean. We can build our way away from the rain, right?" (Lasse).

This understanding has similarities to how the City of Copenhagen has approached climate change adaptation as management of water, an issue that can not only be calculated and dealt with, but can also function as an opportunity to create a better city. These connections between the City of Copenhagen's approach and how climate change is mentioned in everyday talk emphasise the argument that the various kinds of denial are socially organised rather than individual and that how an issue is staged matter (Jensen, 2013; Norgaard, 2011). The extraordinarily hot summer did, however, seem to challenge the idea of climate change as manageable, in the quote above. Common for these two accounts is that the experiences do not appear to evoke similar frightening associations, as we have seen in the previous quotes above[34].

Peter expressed uncertainty about the causal links between certain weather phenomena and climate change, but reflected on the presence of climatic changes as something that increases the risk of similar events:

> "… it's difficult to say whether one weather phenomenon is climate change or not. That there was a drought last year, was that climate change? At any rate, you can say that there is probably a bigger risk of periods with more drought that also affect our everyday life, because you are not allowed to use water and don't have a society adapted to drought" (Peter).

As I have presented here, the experiences of an unusually warm summer evoked different degrees of worry among the participants, but were generally associated with climatic changes. The linkages made between weather phenomena and global climate change lead me to understand climate change as a risk as well as a condition that the young Copenhageners relate their everyday life experiences to.

Stories about experiencing cloudbursts in the city

Although I have stated in Chapter 1 that I engage in small stories, stories that are different from the narrative ideas of stories as structured around a plot and with a storyline

[34] I do not have sufficient empirical material on gendered differences of these reflections.

(Riessman 2008; Sandercock 2003), there are examples of such structured and plot-based stories in the empirical material. A few times, the participants talked about their experiences as anecdotes about how they experienced a particular extreme weather event. I include a couple of these here, as they emphasise the points from Chapter 4 that the occurrence of heavy cloudbursts in the past decades has made climate change much more tangible in urban planning and in everyday life (Interview A; A. B. Nielsen and Bislev 2018). As Lykke Leonardsen pointed out, most Copenhageners can recall one of the heavy cloudbursts (Interview A).This was also the case for Anne and Nanna who both talked narratively about their experiences with one of cloudbursts in Copenhagen in recent years.

> "It hadn't occurred to me that a cloudburst was coming, and I was at Condesa[35], you know the place? Right. So, I was at a party down there, and it's a bar that is in the basement [laughs, ed.]. And that is just really impractical, when there is a cloudburst, right? So, everything was wet in there, and I had parked my bike on Højbro Square which is also concave. And then I sat with my friend on a set of stairs thinking: "It will be over soon, this rain". It just wasn't. It was just a deluge down the pavement, right? It just didn't stop. And in the end, I was like: "Then we just have to bike home, even though it's pouring", because you can't get a taxi, can you? And then it was down to get the bike and I mean, I think that I had water up to my thighs and my lock was under the water, and I had to find that lock somewhere down there! And on the way home! I had the kind of boots on, you know, that are a little open, and they were completely filled with water, when I came home. And on the way home, I had lost a pedal that had simple fallen off the bike while I was biking! And I was like: "This is, this is really extreme weather! Right?" It was also kind of fun. But people were not supposed to be out in that kind of weather. And I think about that, when the weather is a little extreme, right? We live a very controlled life and then there are these examples where you can't do shit. Now, it's not the worst to lose a pedal or a shoe. But, you know, a lot of people had their basements flooded or their houses were destroyed or whatever. You have to take it seriously" (Nanna).

> "Well, we lived on Strandboulevarden[36] in 2011, when there was a cloudburst. And I think it occurred to me then […]: "Shut up, guys. All the water is running down this way!" […] We had been at Roskilde Festival, so we hadn't experienced it, but we came home and saw that it was like walking through a war zone. People threw up in the stair cases, because they had been in the basements, and it was so gross and so on. Things were everywhere, like on the streets. We had an attic, which was really lucky" (Anne).

From these two anecdotes, it's easy to imagine the sensory experiences of a cloudburst, from the light and fun description of an unexpected end to a night out to the unpleasant and almost scary comparison to a war zone. These two stories resonates with the descriptions of the comprehensive extent of some of the recent cloudbursts in Copenhagen. In the following, I move from these stories of a particular weather phenomenon to exploring narrative accounts about warmer temperatures in a broader sense.

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[35] A restaurant and bar in the centre of Copenhagen.
[36] A large street in the Østerbro neighbourhood.

Stories about warmer temperatures

The experiences of an unusual summer in 2018 had a distinct imprint on several of the participants' narrative accounts. More broadly, the participants connected experiences of increased temperatures in both summer and winter to climate change. Many of the stories about seasonal changes contained reflections about different seasons. Experiences with various seasonal changes were often entangled, as reflections about warmer temperatures in both summer, autumn and winter were often presented together:

> "I think, that when we have these very warm summers, I think about it a lot. That it must be because there is something going on with climate change, so that we suddenly get a heat wave in this country, which I don't think we should have. And when we don't get snow and stuff like that. When everything just gets warmer and you can sort of feel it. Last year, when we got that drought summer, almost, right? That's something that I find scary, because it's something that we can sense and feel now. And I don't think that it will become better, if we don't change the way we live" (Olivia).

> "I think that I mainly think about it [climate change, ed.] in the winter, actually. And I think it is that way, because of the absence of snow […] Or in the summer, like last year, when it was suddenly hot, hot, hot. That was, like, very unusual for Denmark. It is not normal that you walk around in 30°C warmth in little Denmark. It is usually so that 20°C, that is fantastic, right? And I think, yes, I think that in the winter, when there is no snow and so, it is unusual because suddenly you can walk around in December and it is still 5°C" (Ditte).

> "You do generally see these big fluctuations in the last couple of years, in the form of a heat wave summer, a drought summer, the wettest autumn, we've ever had, and winters, where there is no such thing as snow anymore. White Christmas no longer exists. And in my opinion, it's naïve to believe that it's not because of climate change and that it's not because of man-made climate change" (Thomas).

Temperatures higher than expected and an absence of snow were generally things the participants associated with climate change. The sense of knowing the seasons in Denmark is very present in the participants' small stories, and these immediate experiences with various unexpected changes in seasonality seem to threaten the sense of ontological security. This relates to the accountability of the seasons in northern countries (Ingold and Kurttila 2000; Norgaard 2011; Vannini et al. 2012). Norgaard writes about the rhythms of the seasons in Norway: "The arrival of cold temperatures and snow marks the changing of the season, part of the sense of the ordering of time and place that forms the sense of moral order and ontological security" (Norgaard 2011, 37). In this sense, the known characteristics of the seasons are part of the confidence taken in the continuity

and taken for granted-ness of everyday life. When these are unexpected, an attentiveness is often raised. Likewise, the participants in this research did not solely talk about changing of the seasons as a backdrop to everyday life, but as part of knowing one's place of residence, be it the neighbourhood, the city or the country. The seasons were talked about as periods of times which you could previously rely on.

However, (at least) two reservations can be enhanced, relating to the implications of these accounts of sensory and physical experiences with local weather and seasons, what we may term accounts of **social scares** (Ungar 1992).

Firstly, the idea of a White Christmas is given a strong symbolic and cultural meaning in the quote above from Thomas. But as psychology scholar Trevor A. Harley (2003) notes in a British study, the desire for a White Christmas among Brits is often based on nostalgia and idealised thoughts, as a "significant snowfall on Christmas Day" is statistically not that common in lowland Britain. The same can be said about the occurrence of White Christmas in Denmark. According to the Danish Meteorological Institute, a total of nine Christmases were registered with a national blanket of snow in Denmark since 1900 (Cappelen 2019). What is at stake here is not whether there have been White Christmases, as that could have been experienced locally[37]. Further, it is not necessarily the presence of a White Christmas in itself, but the symbolic meaning that seems threatened by increased temperatures. As such, the construction of place and the basis on which the seasonal changes are experienced, are linked to symbolic values embedded in cultural traditions. With climate change follows the anticipation of a future without White Christmases, which again can be understood as a threat to the ontological security, despite the rare occurrence of White Christmas in the past. The nostalgic memory of Christmas is threatened by climate change, which is possibly related to a kind of fear or grief. Some scholars have argued that such feelings of fear and grief can be constructive for engaging in climate issues (e.g.; Moriggi et al. 2020). I elaborate on this discussion in Chapter 7.

Secondly, the attentiveness towards climate change seems somewhat fleeting. The quotes above represent reflections about climate change, when facing temperatures understood as irregular. However, a couple of the participants said that their attentiveness towards climatic changes was less present on days with predictable weather. For instance, Ditte,

[37] … and therefore not registered in the national statistics.

who mentioned how she thought about climate change when she experienced temperatures or weather phenomena out of the ordinary, said about the fleeting character of these thoughts:

> "I think about it [climate change, ed.] when you can downright feel the impact. Like, I don't think about it on a day like this, where there is a bit of rain and then the sun shines a bit and so on. Then I don't think about it. It is more when you, when you feel … When you are affected by climate change yourself, that makes it more present" (Ditte).

Lasse presented a similar distinction between the weather and climate change:

> "When we get extreme weather, right? A lot of heat, drought, a lot of rain and things like that. Then I think about it [climate change], right? But on those average rainy days like this, I don't think about it" (Lasse).

The attentiveness towards climate change seems less urgent on days with weather that is expected or understood as "in place" in the context (Cresswell 2008). This echoes Ungar's (1992) point that the attention given a social scare can disappear once the weather returns to how it is expected to be, and the points from **Giddens' paradox** (Giddens 2011), that the intangibility of climate change makes it difficult to grasp. Weather that is considered very different from normality can be a social scare linked to ideas about an uncertain climate future. However, in a country like Denmark, rainy and grey days are expected, and sensory experiences with this kind of weather do not appear to provoke the same attentiveness towards global climatic changes, as the danger of climate change can be understood as passed. Similarly, Kamilla said that she experienced that people around her, who she didn't expect to react to climate change, did so during the summer in 2018, but "… then we had a summer, that wasn't as extreme and so people are back again, I think" (Kamilla).

Above, I have presented experiences with climate change as associations with warmer temperatures, but experiences with other weatherly changes were also mentioned by the participants, especially experiences related to rain. How we can understand this as important is the focus of the next section.

The importance of weather and seasons

How can we understand these accounts of experiences with changes in the weather and seasons as important for climate change research and planning? In the following, I explore ways of understanding the weather and seasons as co-constitutive of place in everyday life, to analyse the importance of such associations.

> "It's […] difficult to explain or, you know, express what it is, that makes one like to live here. It has a lot to do with a sort of feeling of belonging, right? And also knowing everything. I mean, I can name all the good breakfast spots, all the good lunch spots and all the good dinner spots, where the sun comes out at that hour, that time of the year, you know?" (Nanna).

Narrative accounts about knowing the local neighbourhood surroundings often entailed familiarity with the physical surroundings and life within. As Nanna mentioned in the quote above, these aspects can be difficult to express but can be about being acquainted with the local cafés or having a kind of local knowledge about spots to enjoy sunlight. These accounts of local knowledge are about bodily and sensory experiences, memories of events in the physical surroundings and reflections about choices in everyday activities. Experiences with the local weather and seasons seem to be part of this local knowledge, conversations and lived experiences with life in the city.

Knowing the seasons and the weather

Several participants mentioned the changing seasons, when they talked about everyday life in their neighbourhood, as either something constitutive for the activities they engage in or describe their appreciation of their place of dwelling. Frederik mentioned the different seasons in relation to different activities: "It is also very seasonal in Denmark, whether you can use the outdoor spaces or not" (Frederik). He elaborated with reflections about how the Nørrebro neighbourhood changes accordingly:

> "I actually feel that I am happy to live here all year round, but you know the summer is great because people are out more and you are out more yourself, and I think that… a lot of cosy things are happening […], things like work weekends in the housing cooperative, that I think is quite great" (Frederik).

For Frederik, summer also has to do with the social life in the neighbourhood and the activities that he and others engage in at this time of the year. This is similar to a reflection that Anne made during the interview. Talking about summer nights where she and her family enjoy dinners in the yard with their neighbours, she stressed the influence of the seasons for such activities:

> "We live in tiny flats, so … It does get closed down in the winter, right? Because none of us have the space for something like this. Perhaps we should try. The opportunity that the summer gives us must be seized, to have that kind of cosiness together" (Anne).

The seasons are talked about as constitutive for the activities that she engages in and for the social life with the neighbours in her building.

Several participants living in Nørrebro mentioned Assistens Kirkegård[38] as a sanctuary during difficult periods, a get-away place from the busy city, a place to notice flora and animal life or a destination when walking with friends (e.g. Ditte, Gustav, Jacob, Lasse and Sarah). Christina mentioned Assistens Kirkegård in relation to seasons changing: "It has been the sort of place where one could follow the seasons changing and experience when the first little seeds start to come out in the spring. I think that that has actually been quite fantastic" (Christina). Elaborating on what it means to her, she said:

> "Oh, now it becomes all sentimental, but it almost gives you a sort of hope once in a while, right? That thing, if you think it's been a long winter or, especially when I was a student, when perhaps things were taking their usual course, and towards the end being tired of studying, as I was, that: "Ah, the end of the semester is approaching, and possibly my studies on the whole, right? And the end of winter". So, having such a large park nearby, when living so close as you do in Nørrebro. That has been very significant for me" (Christina).

The first plants bursting into bloom are mentioned as something she relates to feelings of hope. The first sprouts in the park are related to her knowledge of the seasons and yearly cycles – something that she takes for granted, counts on as a matter of course and that she relates to thoughts about the rhythm of her year and mood. This is echoed by Birgitte, who said about her favourite time of the year in the neighbourhood:

[38] A famous large cemetery and park in the Nørrebro neighbourhood, characterised by its surrounding yellow wall and large trees. The name roughly translates to the Assisting Cemetery. It was built in 1760 to remedy the lacking space for cemeteries in Copenhagen, and at that time, the location was well outside the city. For decades, the cemetery has been used as a recreational park, and today, part of the cemetery has been transformed into a park (Federspiel et al., 1997).

> "I think it is when spring is just starting, and the plants start to come out. Then the courtyard just changes from sort of drab and brown colours to that tender green colour. That is pretty fantastic, I think. I like that. At that point, you think: "Ah, the summer is on its way now!" [Laughs, ed.] […] It might be something that I imagine, but I feel that I have an easier time being happy and smiling more, you feel like being out more. And there is constantly something to do when the weather is good. You feel like you cannot miss it. You just have to enjoy it while it is there" (Birgitte).

The cycle of the year is presented in relation to different moods and activities. Good weather is presented as a rare occurrence not to be missed before it ends again. The ideas of "good" and "bad" weather are, as others have pointed out, contextual, negotiated and dependent on the expectations that people have (Madzak 2020; Vannini and Austin 2020). Although, in the quote above, a certain kind of summer weather is implied.

The participants seem to count on their previous knowledge about the various seasons, and relate this to their lives, past memories and expectations for the future. Ulrikke and Victoria talked about how unpredictable weather made them think about climate change:

> Ulrikke: "I've thought about it [climate change, ed.] this week. The day before yesterday, the weather was lovely. It was mad. And yesterday, I was like: "Wow, it's cold. I can't stand it!" I mean, I just had to wear a jacket. But I was out again in the evening, and it was good again. How can it change like that?"
>
> Victoria: "Yes, today as well, when I saw the sun, I thought: "Wow, the weather is good again!" I went out with my children without a jacket, and it was so cold".
>
> Nina: "And why did that make you think about climate change?"
>
> Victoria: "It's that the weather changes. It hasn't been a real summer, and then it's fall".

Here, the unpredictability of the development in the weather and the seasons that they experienced made the two think about climate change. It is obvious that the young Copenhageners are far less dependent on the changing seasons than, for instance, the Sami people in the study described by Ingold and Kurttila (2000) or farmers in Zimbabwe, as described by Abbott and Wilson (2015). However, it does seem that the cycles of the year are an important part of their local knowledge and that this knowledge is connected to expectations and anticipation about what awaits in the various seasons.

These accounts about the importance of the weather can be understood with the help from the idea of **weathering** (Madzak 2020; Vannini et al. 2012). As such, weather is not

just a phenomena that happens, but is entangled with everyday life activities and understandings of place, be it the neighbourhood, city or country. Weathering means being in weather as a dynamic process and it is so because few activities in everyday life are "untouched" by weather (Vannini et al. 2012).

To sum up, I interpret that the seasons are part of what the participants value and take for granted in their daily life in the neighbourhood, as they seem to know and count on the cycles of the seasons. Some of the changes that the participants mentioned when talking about climate change have to do with how they experience changes in the seasons that they otherwise know from experience and count on in their daily lives.

Talking about the weather and talking about climate change

Understood this way, the weather is important due to its material or physical appearance and many daily interactions with it. Furthermore, the weather has a strong presence in everyday conversations. As mentioned, Christina said that the weather is a common topic of conversation, especially between strangers. In her field work in the Norwegian countryside, sociologist Kari Marie Norgaard noticed that:

> "… small talk occurred in spaces where people met in passing, while waiting for a bus or walking along the street. Not only was the small talk meant to fill a short time space, but on such occasions, people were often seeing someone they hadn't seen for a while. Launching into political discussions would seem inappropriate. Thus, although the presence of climate change as a topic of small talk worked to keep weather and climate change in people's awareness, it did not allow for displays of deeper feeling or generate the kind of more serious analysis that could lead to a sense of what might happen in the future or what could be done now" (Norgaard 2011, 99).

In this fieldwork experience from Norway, the weather and climate change were considered harmless and light topics to talk about, detached from political disagreements or other topics that would be inappropriate for casual conversation. This resonates with the quote from Christina, in that she mentioned talk about the weather as common between strangers. Here, the weather is presented as an ever-topical theme, but not necessarily a substantial one. The idea of weather as a common topic for small talk appears in broader Danish cultural contexts and in recent studies. Talking about the weather is considered particularly interesting for Danes because of the ever-changing character of the weather and the influence it thus has on everyday life (Madzak 2020). Talking about the weather is not solely a Danish phenomenon, but typical for countries on similar latitudes with similar experiences of moving weather (Theilgaard 2010). The ever-changing nature of the weather is considered key in understanding the common interest in talking about it: "People talk about the weather because it changes regularly enough to allow for habituation, but irregularly enough to allow for surprise and drama. We would not chit-chat about the weather, or attempt to predict it, if it did not move" (Vannini et al. 2012, 373).

The weather's moving character can be understood as important to talk about and for the feeling of knowing a place, in two layers: First, because of the ever-changing character, that the weather is never the same, but changes hourly and daily, change in the weather in itself becomes predictable. Second, this predictability is challenged by climate change, for instance when experiencing several months without rain (as in the summer months of 2018) or a cloudburst considered out of the ordinary. This second layer appears, when a change in the weather is not understood as predictable or within understandings of normality. Climate change may then further actualise talk about the weather, because it touches upon broader understandings and ideas about the future and challenges the sense of ontological security.

Small talk about the weather may be an integrated part of (Danish) everyday life in a seemingly safe and trivial sense (Madzak 2020; Norgaard 2011; Theilgaard 2010). But perhaps talk about the weather deserves further acknowledgement as an important matter for human meaning-making of everyday life and not simply as a 'safe' topic for small talk. According to Vannini and colleagues (2012), talk about the weather is important as

> "… the ways people experience and talk about weather, the ways they develop emotional attachments and inhibitions to it, and the ways they sense and comprehend meteorological processes and draw significance from them are not only interesting but also particularly valuable as keys to deciphering larger scale social processes" (Vannini et al. 2012, 363).

Understood this way, narrative accounts about experiences with the weather are an important part of everyday life experiences, and might hold important understandings of broader themes such as climate change (Hastrup 2011; Madzak 2020; Vannini et al. 2012). Some of the participants mentioned a change in small-talk topics, with climate change now occurring as something to talk about, because of the impacts of past events. Peter noticed that the long drought in 2018 had been a topic to talk about at his workplace:

> "… like you would talk about the weather in general. So, a little like the chit-chat talks about the weather, right? […] It is generally a strong presence for people. And I think that, especially in the last couple of years, it has started to be more present. People talk about it. And every time there is some extreme weather, it's there. It's not that everyone talks about it, but a lot of people mention it in relation to climate change" (Peter).

In the second focus group, a similar sense of the development in the talk about weather and climate change appeared:

> Nanna: "Well, Danes do love to talk about the weather …"

Sarah: "Yes!"

Nanna: "… and whether it's climate change or not. And now it has become so that we all talk about the weather and now also about climate change, even though it's not that the changes in the Danish weather like, blow your mind, right? […] But what I think about a lot in terms of the weather is, that those small changes that we see here, they cause loss of human lives in places closer to the equator, right?"

Here, talking about the weather and climate change is related to consequences experienced in other geographical locations, although, as mentioned by Nanna, the local changes that she has experienced, are not dramatic. This echoes the point presented above, that the specific experiences with changes in the weather are associated to broader reflections about possible consequences, near or distant. But in various ways, reflections about the troubles associated with weatherly changes are mentioned to take up space in conversations. Similar to what Gundelach and colleagues (2012) conclude, the young Copenhageners do express worry about the global issue, although the changes that they are currently experiencing are not altering their lives.

Uncertainties expressed about experiences

Through this chapter, I have explored the participants' small stories about various experiences with climate change. I have showed how the participants in various degrees talk about weather events and climate change as related. As Beck (2009) argued, uncertainty is a condition in times of climate change, where individuals are dependent on expert knowledge. As opposed to clear scientific distinctions between climate change and weather, in everyday life, these two phenomena are narrated as both conflating and not. In relation to climate change experiences, this uncertainty can be understood as a sense of both **knowing and not knowing** (Norgaard 2012), both about the links between specific weather events and global climate change and about the extent of climate change.

As Peter argued in one of the quotes above, it can be difficult to know whether an event of extreme weather is related to climate change, but the risk of these events happening increases with climate change. Most of the participants expressed more or less of such uncertainty about whether or not their specific experiences could be directly linked to global climate change (e.g., Sarah; Thomas). Some examples of uncertainties and expressions used in relation to these are:

"Sometimes I find it difficult to judge what is climate change and what isn't" (Sarah).

> "I have been exposed to various weather phenomena through the years. But whether they have been climate change or not? There is no telling if it is a direct cause […] It is difficult to say whether it is weather phenomena alone" (Peter).

> "Here, today, its 10 degrees or something, and we are in November. Is that also climate change? Heavy rain, flooded basements. Like that. But it's difficult to say in a, say, life perspective. Is it something that others have actually also experienced, a generation ago, to have a flooded basement? It's difficult to say, because one has only lived the time, that one has. And you might ask your parents about it, but then, they will also have a memory, that the summer was always good or that it never rained. You know, that thing about how the snow always lay thick. So yeah, swings in the weather. I think that I have experienced it" (Rikke).

> "No, I don't think there are specific episodes […] It is more, what can I say, the amounts and lengths of the various phenomena that make me think, that something has happened since I was five years old" (Henrik).

So, climate change is not narrated as something that has altered their lives completely, but as differences compared to how things used to be. As Henrik mentioned, it is the same kind of weather phenomena as experienced before, but they are intensified. This can be an important reason for why climate change is considered a diffuse phenomenon in everyday life. The weather events that might be caused by climate change are intensified versions of phenomena that they know, and not unknown phenomena that suddenly occur, making it difficult to assess when an event such as heavy rain is "just the weather" and when it is a token of global climate change. This can be interpreted both as a kind of **interpretive denial** (Cohen 2001) or as an example of the **uncertainties** related to risks in general and climate change in particular (Beck 2016). Based on the participants' narrative accounts, I cannot conclude whether these stories are expressions of deliberate acts of looking the other way and not wanting to know, or consequences of uncertainty as a condition. What I can conclude is that the young Copenhageners do experience unusual weather events and talked about them, when I asked them about climate change.

Perhaps extreme or unusual weather phenomena can be an opening for change in that it can be an eyeopener, as Kamilla argued in a quote earlier in this chapter. How the young Copenhageners talked about responding to climate change and what kinds of challenges this points to, is the focus of the next and last analytical chapter.

The second type of what I term uncertainties about experiences has to do with understandings of the extent of climate change. Gustav expressed a clear example of this:

> "I think about there being like these two options. There is climate change as a fad[39], a phenomenon of panic, which would be great if it were. That would be really cool. But

[39] My translation of the Danish word 'modefænomen'.

> there is also climate change as reality, as something that I may deny a little, something that I hope does not have a great meaning. […] a fad, that it is something momentary, that will disappear by itself and won't leave a bigger imprint. I hope that climate change is that. […] Imagine if I really have to reorganise my life. Imagine if I am not allowed to drive cars anymore. Imagine if I am not allowed to ride my moped anymore (Gustav).

Here, the convenience of not knowing is emphasised, because the transformations of everyday life are considered too immense to deal with. This kind of **interpretive denial** (Cohen 2001) echoes Norgaard's (2018) argument about the well-developed **ecological imagination** and lack of **sociological imagination**. As Gustav expressed in the quote above, the difficulties imagining not being able to drive cars or ride mopeds are immense. Another example of what we can understand as denial of the extent of the issue about the limited consequences in Denmark is exemplified with Henrik's reflections above. Similarly, he said about possible consequences of climate change:

> "… when you live in Denmark, it might be pretty cool, but I imagine that when it suddenly hits 46 degrees in Paris. And that is, what, an hour and a half flight away from here? That is starting to get a little crazy. And it seems like it's starting to repeat itself year after year and records keep getting beat. And I think that we might be able to live with it in Europe, but if the same thing happens in Africa, some places will become uninhabitable. And the questions about what it means to me? Of course, it is these little things that we see in Denmark, and not something that I feel changes my way of living at all. But you do become more aware that you have to, how can I say it? The individual contributions to make sure that we can find a good solution to this, become more and more important" (Henrik).

Here, a distinction between the possible consequences of climate change is presented, between what we can term manageable consequences in Denmark and unmanageable consequences in other places of the world. From this, I interpret a kind of **implicatory denial** (Cohen, 2001) or **denial of self-involvement** (Opotow and Weiss 2000) and **exceptionalism** (Norgaard 2011). This can be understood in relation to the grand narratives about Denmark as a successful and green country, exceptional both in terms of its little size and its role as a pioneer nation. However, at the end of this interview extract, Henrik mentioned individual contributions. In the next chapter, I look into how ideas about individual responses are presented and how we can learn about the challenges for individual responses to the global issue. Although I have separated the two kinds of stories here, small stories about experiences and responses were entangled in the interviews and focus group discussions, as in the quote above. In the same interview extract there are both narrative accounts that can be interpreted as a kind of denial and accounts that can be interpreted as caring for and wanting to respond to climate change. The latter is the focus of the next chapter, and I argue that denial and care can be understood as concurrent in the meaning-making processes of climate change in everyday life. Despite the various uncertainties expressed, the participants all seemed to acknowledge climate

change as a global phenomenon, and I have not found examples of **literal denial** of climate change in neither the interview nor focus group transcripts (Cohen 2001).

Concluding remarks

In this chapter, I have engaged in the participants' small stories about experiencing climate change in their everyday life in various ways. The young Copenhageners talked about climate change as both experienced and possibly experienced in everyday life through various changes in weather and seasons. Climate change was also talked about as experienced in the home or building or in the local neighbourhood, such as noticing cracks in the basement wall or new furniture thrown out in the waste shed.

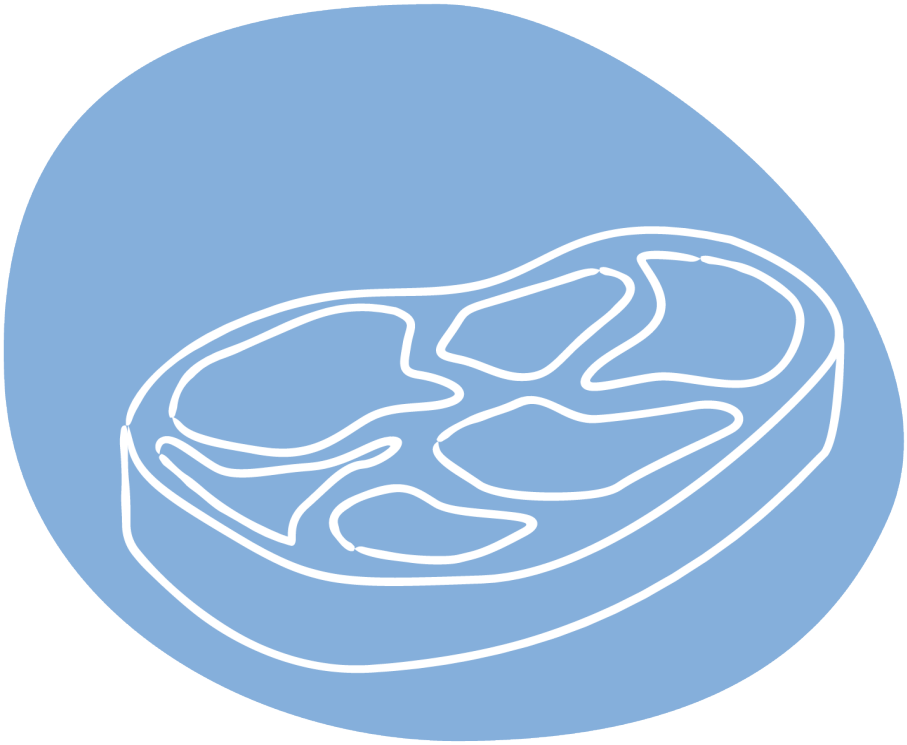
Climate change is talked about as both a near and distant phenomenon. Near in the case of specific events of extreme weather, for instance the drought summer of 2018 and cloudbursts, and distant in the sense that climate change is still talked about as a somewhat intangible phenomenon, that is difficult to be certain about. Changes in the weather and in the seasons were mentioned as intensified versions of known phenomena; a summer than expected or more rain falling than usual.

The weather and the seasons were talked about as more than a neutral or indifferent backdrop for everyday life, but entangled with everyday life, moods and activities as well as memories. Based on the small stories I conclude that the weather and seasons are part of what the participants value and take for granted in their daily life in the neighbourhood, as they seem to know and count on the cycles of the seasons. Some of the changes that the participants talked about when talking about climate change has to do with how they experience changes in the seasons that they otherwise know from experience. Therefore, this is an important aspect of climate change experiences.

In conclusion, the participants all seem to acknowledge anthropogenic climate change, but expressed uncertainties about what is and what is not climate change. This can be understood as reflections on the uncertainties related to the phenomenon. This uncertainty might be emphasised in the participants' stories as they mention intensified versions of weather phenomena that they know, rather than completely unknown events.

Chapter 7

Small stories about everyday life responses



In the previous chapter I analysed the young Copenhageners' small stories about experiences with changes in the climate. As I have mentioned, it was not just direct experiences with extreme or unusual weather that took up space in their stories about climatic changes. Also experiences with various changes in the city were mentioned in relation to climate change. I have argued that changes in the weather and seasons can be understood as a **social scare** that threatens the **ontological security**, as unexpected weather or seasonal changes are related to climate change (Giddens 1997; Norgaard 2011; Ungar 1992).

In addition to these experience stories, all young Copenhageners talked about how they dealt with and took action in their daily life, what I term **responses**. In the participants' accounts, climate change was often talked about as a phenomenon that incites everyday life responses. Abbott and Wilson (2015) have pointed out that for people living in places that have not (yet) been altered by climate-related disasters, the most tangible experiences with climate change are various attempts to reduce the risk of future catastrophes. Others have emphasised that human beings need meaning both in their overall lives and in their day-to-day lives (Bech-Jørgensen 1994; Norgaard 2011; Schutz 1971). Responding to climate change in everyday life can be understood as a way to try to make meaning of the immense and complex issue. If the trust of everyday life is challenged by knowledge about or experiences with climate change, a life that is meaningful in Schutz' (1971) sense can be difficult to attain (Gundelach, Hauge, and Nørregård-Nielsen 2012). Taking certain individual measures as a response can, in this sense, be understood as crucial for the understanding of how climate change is made sense of in everyday life. These response stories are thus important for how we might understand possible openings for change and challenges for everyday life responses in a city like Copenhagen. In this chapter I explore how such stories can enhance understandings of the complexities of responding to a global issue in everyday life. Through the chapter, I answer the sub-question: How can small stories about responses contribute to understandings of climate challenges?

The analytical double view that I have presented in the introductory chapter, the both-and view of climate change in everyday life, also applies to how I analyse the young Copenhageners' response stories. Based on how they talked about responding to the issue, it makes little sense to analytically deal with these responses as something that is either done or not. Rather, climate change responses are storied as something taking various forms. Through the chapter, I argue against the **information deficit model**, the idea that public response to climate change (or other environmental issues) is a question of ensuring people have sufficient information (Bulkeley 2000; Burgess, Harrison, and Filius 1998). Through studying the young Copenhageners' response stories, I explore how we might enhance our understanding of the potentials and limits of individual **response-abilities** in relation to climate change (Freudendal-Pedersen 2014; Zeitler 2008).

In the first part of the chapter, I focus on how the young Copenhageners relate various mundane situations to the global issue in their response stories. I argue that this can be understood as an example of a kind of **ecological imagination** – the ability to relate the impacts of human actions to climatic changes (Norgaard 2018). I interpret the young Copenhageners' small stories as examples of such ecological imagination, in other words that human beings have an influence on Earth's condition and thus an agency to change it. I also explore what openings for change can be understood from these small stories. Responding to a global issue through everyday life activities and situations is, however, challenged by a number of aspects that I argue leave individual everyday life responses inadequate to the extent of global climatic changes.

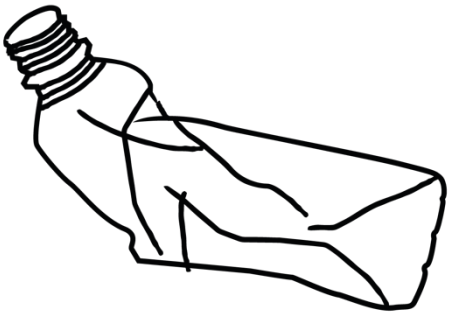
In the second part of the chapter, I engage in aspects concerning Norgaard's conceptualisation of the **sociological imagination** – the ability to recognise societal structures that damage the climatic systems (Norgaard 2018). I present three challenges for everyday life responses and argue that there is an incongruence between the everyday life **response-abilities** and the extent of the global issue (Fjalland 2019; Freudendal-Pedersen 2014, 2016b; Zeitler 2008). The three challenges are based on stories about **knowing and not knowing** – how the young Copenhageners talked about both knowing about climate change and interrelated problems and not knowing how to act in certain situations, **pragmatic everyday life responses to global issues** – how they talked about changing some parts of their daily lives while maintaining other parts and balancing daily needs with the larger issue, and the discussions about climate change as an **individual or a collective responsibility** – stories about individuals' responsibility for global issues and calls for other actors such as politicians, companies and institutions to take responsibility.

Everyday life responses in various mundane situations

> "I don't think about climate change that profoundly, but I think about the things, I do. I think that you should take responsibility, especially when we live in such a wealthy country, where we are able to take responsibility. And we have the options, so I actually kind of think that it's our duty to do so, because we have the surplus resources. So, it's more the things about sorting waste and all those little things that a lot of people do. But also about searching for more second-hand stuff and try to buy less and things like that. I actually think about a lot of the things that I do […] It can be difficult, and you have to follow your own gut feeling, because I think that climate change and all of this is very diverse. There are many shades of it, and it depends on which parameters you measure"(Olivia).

> "It [climate change, ed.] is a strong presence. It is a very strong presence. At any rate, when I have to think about bigger life considerations. And when you do that, it also affects my thoughts in the everyday and choices that I make during the day. So, I try to adjust my lifestyle to the extent possible with the possibilities that I have to act with as much thought as possible, climate wise. And that can be everyday things like waste separation, but it can also be about choice of flights, what we eat and what kinds of clothes we wear. What kind of dish soap do we use? Yes, transportation, for that matter" (Peter).

The young Copenhageners all talked about how they respond to climate change in their daily activities and how they reflect on these responses, rather than merely about weather phenomena and events that they relate to changes in Earth's systems. Climate change is a topic they talked about in relation to personal and sometimes intimate everyday life activities and situations that remind them of the global issue. These cover a wide field of choices, ranging from momentary reflections about how much soap to press out of soap dispensers (Lasse) to considerations about whether or not to attempt having a third child because of carbon emissions and the uncertain futures (Anne), or taking possible future flooding into account when looking for a house to buy (Morten). The majority of these stories concern individual choices or activities, rather than collective. This point relates to the three challenges that I elaborate on later in this chapter.



These response stories are about linkages between various daily life activities and the global issues, linkages that are less direct than the ones made in the stories about experiences with weatherly changes that I analysed in the previous chapter. These indirect linkages can be understood as examples of how well-informed the young Copenhageners are about the causes of climate change and the relations between human activities and developments in the physical surroundings, in other words a well-developed **ecological imagination** (Norgaard 2016, 2018). Norgaard (2018) emphasises that the ecological imagination in general is much more developed in Western countries with the example that American citizens find it easier to "… imagine the "end of the world" than a switch from using fossil fuels or an economic order other than capitalism (Klein, 2014)" (Norgaard 2018, 172). As I will demonstrate with examples from interviews and focus groups in this first part of the chapter, the young Copenhageners express a high level of awareness about how even small everyday life choices may have an impact, for instance in relation to carbon dioxide emissions. When talking about what made her think about climate change, Rikke linked her own choices to both municipal initiatives and refugees:

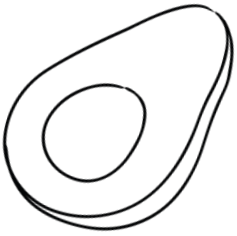
> "I actually think that I do that pretty often. I mean just. Well, what the City of Copenhagen has done, which is to initiate this separation of waste, that makes you think, every time you throw something down there: "Why are we doing this?" There are so many choices you make that have something to do with the climate. But it's not, like, every day that I think of, let's say, climate refugees. But then again, you can barely read the news without something being about some refugees. But a lot of that is also about climate change, I think" (Rikke).

As I have also pointed out in the previous chapter, these everyday life linkages are broader and more loosely defined than natural scientific studies on the impacts of specific activities. In this project, I have not "tested" the natural scientific proof for the linkages that the participants mentioned. Instead, I treat them as expressions of the participants' ecological imagination or understandings about different lives on the planet as related. What is particularly interesting about these response stories is how they might help further understandings of how everyday life is talked about as linked to global climate change in other ways than the scientifically or politically agreed upon.

Most of the young Copenhageners related various mundane situations and activities to the global phenomenon in their stories. These small stories about mundane situations evoking response actions have to do with the reflexive processes of relating specific activities and situations to the abstract phenomenon, such as domestic activities like shopping for groceries, choosing what to wear and collecting waste from public spaces. What is particularly interesting about them are the reflexive linkages between their knowledge

about or experiences with global climatic changes and mundane activities. Linkages that might be fleeting and, seen from the outside, not straightforward. These associations concern a different aspect of the ecological imagination (Norgaard 2018) than presented in the previous chapter, as these concern activities and situations where the participants do not sense or feel a difference, but reflexively relate this to the larger climatic processes.

As I have pointed out throughout this thesis, previous studies found that the spatial and temporal distance between Scandinavian daily life and climate change has been crucial for the lack of widespread public response to the issue (e.g, Gundelach, Hauge, and Nørregård-Nielsen 2012; Nilsen 1999; Norgaard 2011). For instance, Norgaard's study (2011, 2012) on how climate change was dealt with by Norwegians concluded that people paid little attention to climate change through a kind of organised silence about the issue, although they were aware of the issue. Norgaard (2012) found that they normalised the existence of climate change by creating a common understanding that "everything is fine", despite their troubling knowledge about the issue. Although, as I have explored in chapter 6, there are examples of what I have interpreted as **interpretive** or **implicatory denial** (Cohen 2001), these concepts are not sufficient in understanding the young Copenhageners' small stories about climate change. I cannot find an unambiguous common story of everything being fine among the young Copenhageners' climate change stories, similar to the one in Norgaard's study. Instead, the young Copenhageners expressed that they were aware of the changes in Earth's climatic systems and to some extent worried about future implications. These concerns were entangled with everyday life activities in their narrative accounts. For instance, Emma said that for her, climate change was like a red light glowing that made her think about how to take care of the issue and figure out what to do about it. Likewise, Morten talked about climate change as a "… process that we have to respond to" (Interview 13). Various ideas about how to respond to the issue is what I look into in the following section.



Responding as making climate-friendly choices in daily life

Often, responding was presented as ideas about making the right choice, what was termed the climate-friendly choice by some of the participants (e.g.; Henrik; Morten; Nanna). In chapter 4, I have shown how the City of Copenhagen approaches climate change through mitigation, adaptation and collaboration and how measurements and calculations are crucial for the City's ambitious carbon dioxide reduction strategy (City of

Copenhagen 2012b; Jones 2018). The staging of climate change is professionalised and focused on reaching the emissions reduction goals. In the following, I look into how the young Copenhageners talked about climate change responses in everyday life situations in ways that both echo how the City of Copenhagen has staged climate change mitigation and are different. Most often the ways that the young Copenhageners talked about responding to climate change were different from the institutional framings of mitigation and adaptation strategies. In everyday life, notions about taking care of the planet or being responsible for climate futures are much more present than notions about emissions. For instance, Emma talked about buying organic groceries in relation to both the health of her children as well as the well-being or state of the groundwater:

> "We primarily buy organic, and that's also to take care of the ground water and things like that, that they're not sprayed with pesticides, you know. Or I think about what my children consume, so vegetables: 100% organic or what we can, we separate our waste and my daughter collects waste, if there is any plastic on the playground. I do that too, cigarette stubs or whatever [laughs, ed.] It's those little things" (Emma).

Whereas the response actions from the City of Copenhagen are verbalised in institutional terms such as mitigation and adaptation strategies, everyday life responses are generally talked about in less technical terms that are closer to the everyday life context. However, one term appears often in both municipal strategies and in the Copenhageners' response stories, the term **climate friendly** (e.g.; City of Copenhagen 2015, 2020a; Focus group 1; Focus group 2). In the interviews and focus groups, climate-friendly actions or choices were talked about as the right, good or best choices to make in various situations. Unfortunately, I did not ask the participants to clarify what they meant by this term during the interviews and focus groups, and I thus have to turn to how other researchers have worked with this term in relation to climate change in everyday life. The term has been sociologically related to actions that have a reduced consumption of fossil fuels, compared to other actions, for instance using public transport or taking shorter baths (Gundelach, Hauge, and Nørregård-Nielsen 2012). Often, the term **climate friendly** has been associated with consumption, and Magnus Boström and Mikael Klintman (2019) have pointed out that the concept climate-friendly consumption is an oxymoron, as all consumption has an impact on the climate, despite the efforts of companies to compensate the impact through other measures.

Boström and Klintman (2019) further argue that what has been termed climate-friendly consumption concerns both reduction of the **volume** of consumption, consuming less, and **alternatives** that are considered the better choice, for instance organic food and

products with a type of climate labelling. Both of these kinds of climate-friendly consumption choices were mentioned and discussed by the participants, although most of the participants also expressed uncertainties about what the climate-friendly choice is, for instance, when shopping for groceries. In the second focus group, Sarah, Nanna and Birgitte discussed the complexities when wanting to shop in a climate-friendly way:

> Sarah: "Often, when I am at the supermarket, I have trouble knowing exactly what is the most climate-right choice to make. Whether I should take the organic cucumbers or the cucumbers from Denmark. So, I think that I often don't really know what is the best. But when I am at home, it is about using the food and not throwing anything out. I think that it's easier [to figure out, ed.], because it's about using what you have bought".
>
> Nanna: "I think that the area where I find it difficult to make the good choice is clothes, and I feel that the discussions about food have come further. I mean just that you think about: Okay, I can kind of choose between the organic and the Danish". That is at least two things you can try to balance in the supermarket […] More and more people eat less meat, and there are vegetarian restaurants all over the place and meat replacements and blah, blah, blah. I mean, foodwise, I feel that there is a development heading in the right direction or somewhere that I see, that it can become more sustainable".
>
> Birgitte: "I still think that there are many difficult choices. Because when you start … Quinoa was really big, because it wasn't meat, but then there was a discussion about how it was transported all the way from South America and that they use a whole lot of resources and took food from the locals and well. I just think that, every time that you are told something, then shortly after you figure out: "Fuck, that is also mega awful for the climate. What?" So, I agree. I find it difficult to eat climate-friendly and at the same time eat what you want to".
>
> Nanna: "Yes"
>
> Sarah: "Yes. I was in Netto[40] the other day, and we wanted both mango and avocado for our dinner, but we didn't really think that we could take the liberty to buy both. So we had to choose. And I don't even know. It probably doesn't make all that much difference, but it is just there that I am confronted with climate change in my daily life, when I am standing in Netto and have to choose. That is where I think about what I do".

Various parameters were brought into the discussion about what to buy, such as distinctions between organic and conventional produce, considerations about eating what one has already bought, resources used to produce certain types of food, transportation of the produce, food supply in other countries and the weighing of whether to buy both a mango and an avocado. Here, both of the aspects of climate-friendly consumption pointed out by Boström and Klintman (2019) are discussed: The reduction of what is bought, buying and throwing out less food and the weighing of whether to buy both

[40] The largest chain of discount grocery shops in Denmark.

foreign fruits, as presented by Sarah, as well as buying alternatives, exemplified by the organic or conventional and quinoa, as Birgitte and Nanna talked about.

Interestingly, Nanna pointed to shopping for clothes as a more difficult field of consumption. The participants later discussed what they consider when buying clothes, and Nanna emphasised the difficulties in wanting to buy clothes from a local, small, independent designer and realising that the clothes have been produced in China with the use of chemicals, and how the price of the clothes is not necessarily a guarantee for it to have been produced in a good quality or what she termed with a social awareness. Sarah replied that she buys most of her clothes second-hand, but said that she then buys a lot of clothes, because she finds it okay to do, when it is second-hand. Here, Sarah talked about the two approaches to climate-friendly consumption as clashing, as the climate-related gains of the first approach, buying clothes second-hand as an alternative to buying new clothes, might be outmatched by the volume of clothes bought.

In the end of the extract above, Sarah said that she is confronted with climate change in the supermarket, when she has to make choices which echoes Abbott and Wilson's (2015) point mentioned above that the most tangible experience with climate change for people in the Global North is the measures people take in their daily life. Frederik presented a similar point about consumption as a situation that makes him think of climate change. When asked about when he thinks about climate change in daily life, he replied:

> "You do it [think about climate change, ed.], when you talk about it. You do it, when you catch yourself in the act of some stupid consumption. When you throw away a tray of food or something else that has gone off in the fridge. You do it when … Well, I don't know. I actually think that it really often is part of conversations or considerations" (Frederik).

Kamilla, Nanna and Peter similarly talked about being reminded of climate change through their consumption related to various mundane activities, such as cooking dinner, buying clothes and when trying to make their consumption more "conscious":

> "Well, I think that I more or less think about it [climate change, ed.] several times a day perhaps, actually. Every time I separate the waste, I think about it, and every night, when I am about to cook dinner, I think about it, because I have started to shop more climate-consciously" (Kamilla).

> "I mostly think about it when I am reminded, right? But I think that I think about it … I think that I think about it a lot in relation to food. Food and clothes, because those are two things that I definitely consume a lot of" (Nanna).

> "When I have to make decisions about what I do in terms of transport, leisure time, choice of purchase of food, cleaning detergent, actually everything that we buy. And when we have to buy something, if we can find it second-hand, or if we have to buy something new. And whether we chose to say that we buy something new every week, or if we can make do with buying it every third year. Yes, try to be a little more conscious about consumption. So more or less most of the day, I guess" (Peter).

> "It's something that has a strong presence in our daily lives. Many people don't do that now, but I haven't eaten meat in six years, I think, because I figured out how much of a climate burden it was. And selling our clothes and buying second-hand is also something that we have started doing. And all the big things for him [points to her baby, ed.], the pram and baby monitor, all of the things that come with having a baby, we've bought second-hand. Because I think that climate change is here and now and will continue to be here. And I actually think that you can do a lot in your daily life. I mean, many little things, right?" (Olivia).

> "It could be about whether it's too daft to use the car for this. It's better to just take care of it in the Christiania bike[41], for instance. Or it could be about the daily consumption, things like: Should you choose the Danish cucumber or the Spanish, organic cucumber? So, it's in that sense that it appears" (Frederik).

The the young Copenhageners talked a lot about how they take action in their daily lives reflects that institutions, companies and organisations have encouraged individuals to take action in matters relating to environmental and climate issues and have thus placed responsibility for solving grand issues (Boström and Klintman 2019; T. H. Christensen et al. 2007; Halkier 2016). As I have mentioned in chapter 4, there has been a great focus on how individuals can take climate action, both in Denmark in general and in Copenhagen in particular, and the City of Copenhagen has presented a strong narrative about the need for Copenhageners to collaborate through their actions.

The themes that came up most often in the participants' small response stories were **movement**, from reflections about the daily commute to vacation travels, and **consumption**, such as reflections about what to buy and how to get rid of waste, as presented above. These two areas have been and are continuous focus areas in the municipal mitigation strategies, and both have gained broader public attention in recent years. In chapter 4, I have argued that the City of Copenhagen has done much work to promote green modes of mobility and the separation of household waste. The participants talked about consumption both in relation to what to buy and how to get rid of things and food, and although the City of Copenhagen has mostly focused on the sorting and reuse of waste, I interpret that the participants' narrative accounts reflect the responsibility that has been placed on individuals by institutions like the City of Copenhagen.

[41] Danish brand of cargo bikes popular in Copenhagen and considered by some to be the "original" cargo bike.

With these small stories about everyday life responses, various mundane situations are related to the global climatic changes. These actions are not only practical, but are entangled with dynamics of care and denial and reflections about responsibilities and response-abilities in relation to climate change. For instance, sorting waste is not only narrated as a practical chore, but as an act related to increasing temperatures and reflections about abilities to respond to these changes – whether it is an obligation or not.

Challenges to individual everyday life response-abilities

In the first part of this chapter, I have focused the analytical lens on exploring how the young Copenhageners talked about climate change. In this second part, I scrutinise how these response stories can enhance understandings of climate challenges. I do this by discussing three challenges to individual everyday life responses and **response-abilities** (Fjalland 2019; Freudendal-Pedersen 2014; Zeitler 2008), as the young Copenhageners' stories also point to difficulties of trying to respond to a global issue in everyday life. The overall challenge is that although individuals can make certain climate-friendly choices, the majority of daily activities are bound up on high-carbon systems (Urry 2011). As Levin and colleagues write: "While individuals can choose to switch to non-fossil fuel-generated power, buy efficient vehicles or lower consumption of carbon-intensive goods, many of our daily activities will still result in greenhouse gas emissions" (Levin et al. 2012, 127). Through the three conceptual challenges, I go into detail with this overall incongruency challenge. The three challenges **knowing and not knowing**, **pragmatic every-day life responses to a global issue** and an **individual or a collective responsibility** all point to different aspects of the incongruency that I argue there is between everyday life response-abilities and global climate change. In the following, I discuss the three.

Knowing and not knowing

The first challenge has to do with knowing about climate change while not knowing what to do, what impact one's actions have on the global issue or not knowing enough about the issue. The latter has been explained as a kind of socially organised denial (Norgaard 2011, 2012), meaning that people have tended to distance themselves from information about disturbing issues such as climate change, in order to maintain normality.

Socially organised denial should be understood "… as a testament to our human capacity for empathy, compassion, and an underlying sense of moral imperative to respond, even as we fail to do so" (Norgaard 2011, 61), rather than personal apathy (Norgaard 2011). As I have presented in chapter 6, I have interpreted some of the young Copenhageners' small stories as examples of **interpretive** and **implicatory denial** (Cohen 2001), but these terms to not encompass the challenges of knowing and not knowing. In the participants' accounts about responding to climate change in everyday life, a range of uncertainties were expressed. The name of this challenge is based on Norgaard's (2011, 2012) conclusions about the presence of climate change in the small Norwegian town.

Although all the young Copenhageners in this research talked about the ways they deal with and respond to climate change in their daily lives, none of them mentioned having made drastic transformations because of their knowledge of and experiences with climate change. The term **value-action gap** or **attitude-behaviour gap** (Boström and Klintman 2019; Bulkeley 2000; Stanes and Klocker 2016) concerns the gap between what individuals think and express and how they act, or in other words, respond. Previous arguments explaining such insufficient everyday life responses to climate change have concerned the idea of human beings as rational individuals acting in accordance with information available to them, the **information deficit model** (Bulkeley 2000; Burgess, Harrison, and Filius 1998; Norgaard 2011). According to Burgess and colleagues, the understanding has been that individuals will take responsibility and act accordingly, when provided with sufficient information:

> "If information is presented in attractive, accessible ways, it will be effective in ensuring the public will understand both its rights and responsibilities as environmentally conscious citizens (Chetwynd and Thomas, 1994; Darier, 1996)" (Burgess, Harrison, and Filius 1998, 1446).

However, as various scholars have pointed out, everyday life activities are contingent on much more than rational choices, such as social dilemmas, local norms, social relations and uncertainties (Bulkeley 2000; Burgess, Harrison, and Filius 1998). Therefore, responding to climate change cannot be understood as merely a matter of information (Norgaard 2011). Boström and Klintman (2019) sum up that the gap between what people think or say and how they act has been explained as having to do with both individual and social, economic and practical reasons. Bulkeley (2000) argues that rather than assessing public knowledge of environmental issues such as climate change, we should be analysing public understandings and the entanglements of social relations. This scholarly move entails a change from a rational thinking that people would respond sufficiently towards climate change "if they only knew" (Norgaard 2011).

Based on the participants' small stories I argue that it is not the lack of sufficient information that makes it difficult to respond to climate change in everyday life. Likewise, climate change does not seem to be a background noise, as it has been described in previous studies (Norgaard 2011). Rather, the concurrent knowing and not knowing points to uncertainties and confusion about the best action to take, what the impact of various options are or whether one's individual actions even matter. Similar to the reflections about whether to buy organic, but foreign, or conventional, but local cucumbers, Isabella emphasised the confusion and complexities of shopping groceries:

> "I also get confused. I mean, you look at the organic honey which is not from the EU, and the EU-produced honey. Or the Danish apples. And when you look on the back of the package, you see that the organic apples are from New Zealand, and you are like … It's the thing about resources versus carbon dioxide, right? The Danish apples are sprayed with something, but have been transported a short distance. But the organic apples from New Zealand have been flown or shipped or something, all the way from the other side of the Earth. So actually trying to balance it. Which I think is complex, because you have to be alert all the time" (Isabella).

Here, it is rather the abundance of than a lack of information that is talked about as causing confusion, exemplified by the awareness of resources, carbon dioxide emissions and pesticides usage. Similarly, Birgitte mentioned being confused about everyday choices:

> "You hear about, well, then there is a lot of water in almonds, and all of the things that are from far away and get transported to Denmark, because we want bananas all year round or we simply want bananas. And it's like every time you have to make a choice: I eat meat, but surely someone, who knows about the climate, will say: "Well, then you should eat less of it". And in reality we should probably go back to how we lived 200 years ago, I mean, eat what grows in the Danish soil. But we can't stop the development that abruptly, either, I think" (Birgitte).

These stories echo the discussion from the second focus group, about knowing of various aspects of the consequences of food production and not knowing in detail and thus not being certain. What is particularly interesting in the quote from Birgitte, is that she expressed both knowing that certain types of food are resource heavy to produce or transport to Denmark, acknowledging that others know more about the issue, while also saying somewhat informedly that it would probably be better to eat locally-produced food. In the first focus group, Ditte brought up the difficulties she had figuring out how many processes plant-based mince and other vegan replacement products go through and therefore how climate-friendly they are. The lack of transparency of climate labels

has been called a challenge for climate-friendly consumption (Boström and Klintman 2019).

Adding to the knowing and not knowing, some participants talked about the changing attention towards various fields of action in the public debate, like differences between the campaigns Nanna remembered from the 1990s about turning off the light and that the tap should not drip, to today's focus on vegan diets and encouragement to take the train on vacation: "Today there are different themes than when I was a child. But in reality, it's all important" (Nanna). The different focus areas were also mentioned by Kamilla:

> "There is enormous attention on flying, but not so much on the clothes we wear, for instance how much it pollutes and how much water is used in the production, because young people really like to wear new clothes […] There are truths and there are truths with modifications, right? We have to have our world view adjusted, in some way" (Kamilla).

Whereas I interpret Nanna's examples as the general public attention or media coverage that has changed in the last decades, I understand Kamilla's reflections as kinds of **implicatory denial** (Cohen 2001) or **denial of self-involvement** (Opotow and Weiss 2000) that she has noticed among other young people. It can be understood as easier to choose not to fly which, for most people, is not a daily activity, than considering in depth the production of new clothes. Implicatory denial, then, can function as a distraction or rationalisation of one's implication or responsibility, related to the concurrent knowing and not knowing: "We are vaguely aware of choosing not to look at the facts, but not quite conscious of just what it is we are evading. We know, but at the same time we don't know" (Cohen 2001, 5). The notion of uncertainties that I discussed at the end of chapter 6 also applies to how the young Copenhageners talked about responding to the issue.

To sum up, the general lack of sufficient response action to climate change in everyday life has previously been attributed to an **information deficit** in the public, an idea that has later been argued against (Bulkeley 2000; Burgess, Harrison, and Filius 1998; Norgaard 2011). The so-called **value-action gap** (Boström and Klintman 2019; Bulkeley 2000) has been ascribed more complex explanations, and through an exploration of the young Copenhageners' small response stories, I argue that there is a concurrent knowing and not knowing how to respond in daily situations and what impact their choices will have. Responding to climate change is talked about as a complex and confusing matter which challenges individual everyday life **response-abilities** (Freudendal-Pedersen 2014; Moriggi et al. 2020). This challenge concerns the knowing how to act accordingly, when trying to make climate-friendly choices through mundane situations, especially in relation to shopping for groceries and choosing what to eat. However, it is not always that the

small response stories are about wanting to act, but not knowing for certain how to. Sometimes, the participants' stories contained reflections of difficulties responding to a global issue in an everyday life context with social obligations, practical measures to take and pragmatic everyday life choices. This is the focus of the second challenge.

Pragmatic everyday life responses to global issues?

> "Perhaps I should do more, but it's not something that ... I mean, I think about it, but it's not something that I am aware of in that sense. I'm not anxious about it. I think that something should be done about it, but still I think that I belong to a large part of the population who thinks that we should do something. But from there and then taking action out of the daily things. I don't do that" (Sarah).

The second challenge concerns the incongruence between the range of everyday life responses of individuals and the global issue. A second explanation of the lack of sufficient public climate action has been the idea that people in the Global North are too individualistic, greedy and do not care about the issue and that "if people only cared", they would respond (Norgaard 2011). However, based on the young Copenhageners' accounts, I cannot conclude that they don't care about climate change. Instead, I argue that taking climate action in everyday life is sometimes challenged by constraints and pragmatic choices that help individuals keep up their daily lives. A pragmatic everyday life response can be understood as: "I worry about climate change, but …" which is followed by a number of reasons in the participants' stories. Pragmatic everyday life responses can also be understood as taking climate action through the smaller things in everyday life, such as saying no to a single-use cup (Nanna) or using the bin for organic household waste (Christina). How these pragmatic choices are talked about range from strategies of reducing instead of removing, matters of practical measures, ideas of pleasure and convenience and reflections about the little things. I argue that these are not reflections of **inadequate caring** (Norgaard 2011), but rather of the complexities and constrains of responding to climate change in an everyday life. Responding to climate change in everyday life is not a solely individual matter, as I understand individuals to "… constantly work on, through or away from relationships with others. Those others are in different states of providing care and needing care from them" (Tronto 2017, 32). A very broad definition of **care**, presented by Berenice Fisher and Joan Tronto is:

> "On the most general level, we suggest that caring be viewed as *a species activity that includes everything that we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible.* That world includes our bodies, our selves, and our environment, all of which we

> seek to interweave in a complex, life-sustaining web. (Fisher and Tronto, 1990: 40, emphasis in original; see also Tronto, 1993: 103)" (Tronto 2017, 31, original italics).

Care can be understood as an essential part of everyday life, not least in relation to climate change, even though acts of care can take different forms (Stanes and Klocker 2016). In this section I explore how we might understand pragmatic everyday life responses as more than a matter of inadequate individual caring about climate change.

A common way that the participants talked about climate-related choices in everyday life was as a strategy of reducing instead of removing. This relates to an idea of not wanting to leave out types of food or modes of transportation completely, but rather to reduce the amount of such activities. The idea of reduction as a way to make climate-oriented choices in everyday life was presented by Lasse and Christina:

> "I think I just try to do less of everything. I don't really remove things from my life, so less meat and so. But it's not that I remove meat […] Yes, it's sort of a bit easier. But it will almost have the same effect, or. Yes, we do come a long way. So, if you just eat less meat. Then I at least get meat once in a while, and then it's okay. I mean, I think that I could easily go a week of eating vegetarian food without noticing it. But yes. When I drive a car, I try to think about gear change and driving it neutrally at the right times and not making too many braking stops. But I still drive a car. I mean. Often it is because I have to drive a car, because the connection is poor and things like that"(Lasse).

Being pragmatic about the amount of meat eaten and how to drive a car can be understood as ways of dealing with climate change that allows everyday life to remain almost the same, with the argument that reducing will have almost the same effect. Christina also talked about flying and eating meat in limited amounts rather than "cutting down everything" (Christina). Birgitte similarly talked about eating and transportation choices:

> "Well, I mean, I eat meat and I also fly. But every time, I do consider: Could I take the train? Could I …? Do I feel like eating spaghetti with meat sauce that much or, you know? And I do think that that is the right way. And then it becomes less and less. But I am not where I feel like not eating meat or not flying at all, because that also limits us" (Birgitte).

Here, Birgitte talked about considering the choices she takes, but that eating meat and flying are related to ideas of not being limited in everyday life. Some of the challenges of responding to climate change in everyday life, that the participants pointed to, was the idea of deprivation, when making what they termed climate-friendly, sustainable or environmentally friendly choices. As shown in the quote from the interview with Gustav in the previous chapter, this was related to the possible waiving of driving cars or mopeds. Other times, the small stories contained reflections about changes in ideas about normalities in relation to everyday life actions and habits. Henrik said about a change in eating habits that he and his partner had talked about:

> "It's not that we have made a deliberate choice about something to do better. But we started thinking about how we have actually started to eat less meat, for some reason. But it's not that we have made a deliberate choice about it. I don't know, perhaps it's the unconscious mind that is starting to do something to you" (Henrik).

Although he talked about a kind of unnoticed development of starting to eat differently, Henrik also talked about deprivation and a kind of right to choose in relation eating meat:

> "… some people can be a little hysterical and say: "We can't fly anymore, and we can't eat meat anymore. We can't eat any of the fun things". I mean, it's like, you can't have rules like that. We simply have to find solutions so that we can still the same kind of fun, while we live. Because suddenly saying: "You can't fly, you can't eat meat" and whatever, all the bad things. You can't take that away from people. We have to find solutions, so that we can still do the same things. Then is just has to be a little more expensive. But you can't take that away from people" (Henrik).

From this, I interpret that the idea of cutting out meat from one's diet and stopping travelling by plane are related to (Western) understandings of the individual's crucial freedom of choice. Freedom is considered fundamental to a good and meaningful (everyday) life, although the freedom of some sometimes implies the unfreedom of others (Freudendal-Pedersen 2016b). Possibly having to "sacrifice" certain everyday life activities is talked about as unimaginable. What is also echoed is the grand narrative about the possibility of developing solutions that make it possible for people to maintain life as it is, the argument of "win-win" solutions which entail no opportunity losses, as I presented in chapter 4 (Freudendal-Pedersen 2015a; Rice et al. 2020). The understanding resembles a tool in the current Danish social democratic government's climate strategy, the hockey-stick model which is based on the idea that future technological developments will ensure cheaper and better solutions in the long term (Kildegaard 2020). However, social scientific scholars have stressed that technological solutions are not sufficient because of the various entanglements and social commitments in everyday life (e.g., Freudendal-Pedersen 2016a) and that the problem of issues like climate change might not be solved (Levin et al. 2012; Rittel and Webber 1973). An opposing viewpoint was presented by Anne, who related her way of living with that of her grandparents:

> "If I think about how my grandparents lived. It was completely different. My father talked about how they would maybe have chicken on Saturdays, and that is way fancy. Usually, they ate potatoes. They didn't eat meat every day, and they didn't drive a car, and there's really only one or two generations between 1950 and now" (Anne).

Both Henrik's and Anne's reflections concern the taken-for-granted-ness of everyday life (Bech-Jørgensen 1994), and whereas Henrik talked about not wanting to be told to cut

out all the fun things, like eating meat and flying, Anne seemed to challenge the taken-for-granted-ness of meat consumption and mobilities in what can be understood as **high-carbon lives** (Norgaard 2011; Urry 2011). As such, eating and moving can be understood as linked to what is taken for granted in everyday life as well as to ideas about a good life.

At other times, the pragmatic choices were explained with wishes of pleasure or convenience, both in terms of one's own convenience and in relation to doing things with other people in everyday life. Sarah mentioned that being a student with a limited budget she sometimes prioritised spending her money on an extra draught beer instead of buying the expensive, but climate-friendly alternative in the supermarket (Sarah). That economic considerations are talked about in relation to the pragmatic choices, was also apparent in some of the other interviews. For instance, Peter said that because of the practicalities of working outside the city, he has prioritised driving to and from work: "Well, I haven't found a solution that can replace the car yet, that we can afford in any case. So, it is surely within a pragmatic frame" (Peter). Most of the participants mentioned the car as a mode of transportation that did not consider climate-friendly, and the participants who owned cars often expressed thoughts about this. For instance, Nanna said: "If my life was ruled by climate change, I probably wouldn't have bought or said yes to the car, right? But it is something that I have considered, for instance about the car, right? It is not that green to drive around in something that runs on petrol" (Nanna). The kind of weighing of advantages and disadvantages of various options in relation to climate change was also mentioned in relation to making choices in everyday life. Henrik said:

> "It [climate change, ed.] doesn't have a strong presence in my everyday life. But if I have the choices in front of me, and they fulfil the same need. Then it is an obvious choice to make the climate-friendly choice. But about the planes […] there is just so much comfort when taking the plane, that sort of trumps. So you don't make the climate-friendly choice then. But if you are faced with a choice that fulfils the exact same need, and all the factors are there, then I would choose the climate-friendly choice. No doubt about it" (Henrik).

Here, the convenience or comfort of flying is talked about as crucial in deciding the mode of transportation. Interestingly, it is unclear what parameters are taken into account when deciding whether to make the climate-friendly choice. In relation to weighing different options when going on vacation, Sarah mentioned that she and her partner had decided to fly to a vacation destination, but take the bus home, because they did not want to fly, but did not have a vacation long enough to take the bus both ways (Sarah). Similar to the strategies of reducing instead of removing mentioned above, the pragmatic choice when going on vacation is choosing a compromise of flying and taking the bus, rather than taking the bus both ways or choosing a closer vacation destination. What I take from this example is that in everyday life, responding to climate change is related to more than individual, rational behaviour. When talking about taking climate action in his daily life,

Gustav made a distinction between the ideal and the possible and related it to the two options of climate change as a fad or as reality, that I have mentioned in chapter 6:

> "I am simply not able to live up to the best version of myself all the time. I make mistakes and make an ass of myself, too […] The best version would be that I simply take these changes in the climate as a reality, that I listen to those who speak with some kind of authority: "Now, I shouldn't do this and now I should do that". I could do that, I mean. It is an option, a way of life, but then it isn't a way of life anyway, because I don't think that we are like that. I am not in any case" (Gustav).

This can be understood as an example of **environmental privilege** (Norgaard 2011, 2012) or **implicatory denial** (Cohen 2001), but remembering the double view of compassion and critique that Norgaard (2011) has argued for, it can also be interpreted as an example of the incongruences between limited individual everyday life **response-abilities** and the extent of the global issue (Freudendal-Pedersen 2014; Zeitler 2008).

Nanna said that she had lived as a vegetarian for some years, because she wanted to be the change that she wanted to see in the world, but that she had started eating meat again and had become more pragmatic about climate-related choices[42]:

> "I've later found out that you cannot live completely correctly on all parameters, so it is about finding some form of balance in how you do it. Also so that it fits all aspects of life, right? Not just when you are at home and are the master of what you cook, but also when you go out to eat and at social gatherings. So I think that I have become more loose about it in my daily life, but I think about it just as much" (Nanna).

Finding a balance is talked about as a way to uphold an everyday life that is also social.

The so-called **rebound effect** (e.g.; Boström and Klintman 2019; Gundelach, Hauge, and Nørregård-Nielsen 2012) which covers the possible increase in consumption in one area, when consumption is reduced in another, is often mentioned in relation to climate change and everyday life. I do not go into details with the concept here, but mention it briefly because some of the participants talked about an increase in consumption in one field, when money is saved in another or, as in the example from Sarah mentioned in this chapter, buying more clothes when buying second-hand than one would otherwise have bought. Similarly, several participants mentioned that their spending had changed, as they transitioned from a student's economy to receiving a fulltime wage (e.g.; Christina; Frederik).

[42] A palpable image of this was that when I interviewed her in her home, she was cooking ossobuco for guests coming over later that day. Several times during the interview, she referred to the beef in the pot on the stove, in relation to climate change and her own everyday life choices.

To sum up this challenge, much responsibility for solving climate challenges has been placed on individuals, also in relation to mitigation strategies in Copenhagen. But as everyday life is contingent on various social, economic and practical constraints, I argue that responding to climate change in everyday life cannot be understood as a solely individual matter, and everyday life responses can be understood as a matter of making pragmatic choices or doing what is possible. These pragmatic everyday life choices relate to various aspects of everyday life, from notions of comfort, convenience and freedom to economic considerations and social constrains and considerations. Therefore the pragmatic individual everyday life responses must be understood as more than inadequate individual care for or knowledge about global climate change.

Common for the accounts about what I have termed pragmatic everyday life responses is that they concern the difficulties of taking action as a response to the global issue. Norgaard writes that the focus on individual responses can be understood as a lack of **social imagination**, the ability to connect the damaging social structures, as issues are understood as individual: "As a result, most people can only imagine their impacts on the planet in the form of individualized consumer actions (Shove, 2010; Webb, 2012)" (Norgaard 2018, 172). I argue further that the participants' accounts about pragmatic everyday life choices in relation to climate change reflect a sense of responsibility as well as a number of challenges. The incongruences between these pragmatic everyday life responses and the global issue relates to the third and last challenge concerning discussions about climate change as an individual or collective responsibility.

An individual or a collective responsibility?

This last challenge has to do with reflections and discussions about the impacts of individual actions and the distribution of responsibilities between individuals and cities, national states and companies. As mentioned, several participants expressed uncertainty about the avail of their own actions and often they related the impact of individual actions to the impacts of large institutions. In the focus groups, the participants discussed this in relation to incentives for making certain choices or not and arguments for or against taking action. All of the young Copenhageners expressed what they do to take individual action, but from many of the interviews, I also read a frustration and/or resignation over the limits to individual actions, for instance as expressed by Ditte:

> "I feel that you get a little frustrated, because you, as a single individual. There is not much you can do […] I think that it is a kind of frustration that comes. And like, a kind of fear,

right? Because you are like: "Well, but if not much has happened in the last couple of years. How the hell will the country look, when I am 40? What is it going to be like?" (Ditte).

Feelings of frustration, hopelessness and fear were expressed in relation to possible climate futures, and several participants mentioned difficulties dealing with the distribution of responsibility. For instance, Birgitte said: "I get more and more scared or worried and I think that when you are educated. If I don't do something, who else will? Or if I don't have the resources, who has them then?" (Birgitte). In both focus groups, the participants discussed ideas about climate change as an individual or collective responsibility. In the first focus group, one discussion concerned the influence of individuals:

Anne: "I'm not sure that we can stop climate change by not buying bananas or beef."

Ditte: "It's not what we, who sit here, do that really makes a different. Those in power must take part."

Jacob: "If we insist on buying cheap clothes produced in Asia, they will continue to produce it."

In the second focus group, the participants also discussed the responsibility for action:

Sarah: "Perhaps it is sending a signal through your consumption. As we have talked about, we cannot tax something or do sort of big things, but you can sort of, yes, show which direction, you want things to go or what things you want produced through what you choose to buy, I think. In that way, I think that you have a responsibility and there is something to do to live up to that responsibility."

Nanna: "Yes. I also think that every time that you board a plane, you take part in filling it up. And every time you choose some indigo-coloured sweater, you take part in choosing something with a chemical with a problematic production somewhere, right? I just think that all the decisions, you take in your daily life, in one way or the other, have consequences. And it can be both good and bad, right? Having a responsibility for climate change can also be that you decide not to fly anymore, right? I mean, in that case you have a responsibility on the positive side of the weight. But I mean, it's not one person, who is responsible for climate change. We all are."

Birgitte: "I agree. I also think that it's about taking responsibility, when you vote. In the latest election, the only thing, that I … It was their climate politics. And I think that politicians shirk their responsibility a little. Probably because it is difficult, also in terms of politics. The thing about weighing: We want to have some companies in Denmark, but we also want a green environment and to be a pioneer country for the rest of the world on the climate front. And I think that it is a difficult balancing act. But I think that we could do a little better."

> Nanna: "Yes. I also get a little discouraged sometimes, because it is a global issue. And when the US says: "We don't want to take part in reaching the international goals", I just feel like. There you are with your tuna cans that you have rinsed and think: "Oh, there's such a long way still!", right? So I think that a tiny part of the responsibility lies on us as individuals and as consumers. But then there are also the elected leaders, who have to do more."

Common in the two discussions is the question about what kind of responsibility that individuals have and expressions of uncertainties about the avail of individual responses and possibly frustration about the limitations of response-abilities.

The discussions also reflect a demand for political action and legislation which was expressed by several of the participants (e.g., Nanna; Peter). Peter said that he was pleased that climate change has entered the political debate, but that he wished that the issue will be incorporated into all political areas (Peter).

The City of Copenhagen mostly approaches collaboration about climate change action through volunteerism and encouragement (Jones 2018). Everyday life choices were, as shown above, related to ideas about a good life and, by some of the participants, this was linked to ideas about freedom. From a different viewpoint, Thomas talked about the possibilities of legislative bans to ease everyday life responses:

> "I think that it [climate change, ed.] takes up a lot of space in young people's minds. Also those who don't do anything actively, I think that people think about it a lot […] Some of my friends have the attitude that they wouldn't mind if things that are bad for the climate, beef production, if they simply made it illegal. Because they can easily adapt to rules like that: "Yes, if it's illegal, I could do without a steak." But when it's cheaper than the environmentally friendly alternative, it's difficult when you are on a public education grant, not to resort to that choice. And it is something that takes up space, even for those who don't make deliberate choices about doing things. At least in my social circle, it's something that a lot of people think about" (Thomas).

I do not go into discussions about the possibilities, advantages and disadvantages of legislative changes like the ones Thomas touches upon here. However, this also reflects the limitations of individual response-abilities in everyday life and opens up questions about how individuals" abilities to respond might be widened. Thomas' reflections touch discussions about the relations between the private and the public and how these two sometimes overlap and sometimes are clearly divided. If, as Thomas talked about in the quote above, young people want to take climate action and do what they can, how can the possibilities for responding be enhanced? These are not questions that I can answer here, but it points to interesting discussions about what is a private problem and what is a public issue, to use the wording of Mills (2000).

As I have argued in chapter 4, there are (at least) two grand narratives or exceptionalism stories about Denmark in relation to climate change: Denmark as a green pioneer country and Denmark as a small country. Likewise, the story about Copenhagen as a green pioneer city also has a strong presence in the grand narratives told about the city. In relation to ideas about responsibilities in international terms, both the grand narratives about Denmark as a green pioneer country and as a small country were echoed, for instance:

> "I mean, in Denmark, we can do oh so much and of course we have to be a pioneer country, but if no one else follows suit, our effort doesn't matter. Because the great sinners, as I see it. What can you say? We have the US, or one very important person in the US[43] who denies it, and then we have China which is also just … […] So I think that Denmark is far ahead, but it's like the rest who have to do the hard work, because Denmark is a small player in this market" (Henrik).

The grand narratives about Denmark as a pioneer country and Denmark as a small country are very clear in this quote from Henrik. It points to the importance of the stories that are told, but also to the uncertainties about the avail of individual or nation-based climate responses. This can be interpreted as a kind of implicatory denial, but it can also be interpreted as an expression of sociological imagination.

In this section I have pointed out three challenges to individual everyday life responseabilities. Concluding the chapter, I briefly discuss new normalities as possible openings for change, as the young Copenhageners' small stories did not solely point to challenges.

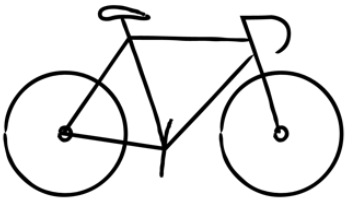
New normalities as possible openings for change?

Some of the participants talked about what can be understood as new normalities, based on the idea that social norms and ideas about what is normal are dynamic and socially constructed rather than given or static (Norgaard 2011). As mentioned in chapter 4, the City of Copenhagen has done much work to make the "climate-friendly" choice the easiest one for Copenhageners. Especially in relation to bicycling, the young Copenhageners talked about how their everyday life choices are often based on convenience rather than consideration for the impacts of their actions, and that choosing to ride their bikes in the city had become the obvious choice of movement: "I don't think about taking the bike, because it has just become a matter of course" (Sarah). This was also discussed in the first focus group:

[43] Henrik is referring to then US president Donald Trump who openly voiced his disbelief in climate change.

> Isabella: "I think about it [climate change, ed.] every morning, when I bike to work and experience how busy the bike path is. It makes me think about: Do you bike, because it is more sustainable or better for the environment, or simply because it's fastest? It's not always when you make a choice that the main argument is the environment. Often time and economy are taken into account. And if the timewise and economic gains are bigger, there is a bigger chance that people make the sustainable choice."
>
> […]
>
> Ditte: "I think, whether you bike. In Copenhagen in any case, it is just the natural choice, you don't really think about it. Either you take public transport or you bike. It's not really an option to take the car, because it would just be completely crazy, because it takes longer to get around. And when you bike, I don't think it has anything to do with the climate. It does not to me, at least. I just think it's awesome to bike in my own world, without being confronted with other people […] And I don't think that I have any friend, who bikes because they think that it's better for the climate."

This discussion resembles the approach that Copenhagen has taken in relation to green mobility, focusing on making it easy to ride a bike in Copenhagen, through expansion and development of bicycle infrastructure (City of Copenhagen 2020b). Surely, these ideas about normality do not reflect those of all Copenhageners, but the interesting aspect in relation to climate change responses in everyday life in Copenhagen is that choosing the bicycle as the mode of moving around the city is presented as the obvious choice and, as Isabella mentioned, one that entails other gains. I understand these response stories as descriptions of changes or developments of normality. Relating this to everyday life sociologies, these changes in ideas about normalities were sometimes talked about as intentional **shifts** while others talked about them as **displacements**, changes that they were more or less conscious of (Bech-Jørgensen 1994). Some of these shifts and displacements seem unproblematic for the participants and other shifts or choices, perhaps the majority, are complicated and conflictual for the persons themselves or when they are in settings with others. I elaborate on how everyday life responses can be understood as challenging in the following.



What is particularly interesting about this aspect is the idea of new normalities. The City of Copenhagen's immense work on staging the bicycle an efficient and convenient mode of transportation and the expansion and development of bicycle infrastructures, can be

understood as the reason for how the bicycle is understood and used by the Copenhageners. This, I argue, point to openings for change, as the bicycle is not, as it is the case for other kinds of climate-friendly alternatives, talked about as a less attractive choice. This inspires questions about in which other areas municipalities and other institutions might explore possibilities for new normalities to develop.

Talking as coping and influencing others

Talking with others was also mentioned as a way to respond to climate change, sometimes as **a coping strategy** (Bennetsen and Magelund 2015; Ojala 2016), a way to deal with unpleasant worries about the issue by sharing them with others (e.g. Ditte) or discussing various everyday life choices. Sarah mentioned that she and her friends often talk about how to navigate climate change in relation to consumption and flying and emphasised that none of them have specialist knowledge to know for sure and therefore talk about big ideas and solutions (Sarah). Other times, the participants talked about taking measures to influence friends and family into changing norms (e.g.; Christina; Kamilla; Olivia; Sarah; Thomas). For instance, Olivia said:

> "I think that doing the small things can inspire family and friends. Now, I have family who thinks that it doesn't help and: "Why should we do that? It's political." But we are the ones to put pressure on politicians and it is human being to human being that inspires and gives new ideas and spread knowledge, right?" (Olivia).

Here, Olivia touched upon the understanding that private troubles are public or political, as emphasised by Mills (Mills 2000) and Hanisch (Hanisch 1970, 2006). Whereas Olivia talked about inspiring friends and families through her own actions, Thomas said that he tries to influence his friends in a more direct way: "I don't get mad, if friends […] buy beef or whatever. But I do try to nudge or make people do something, suggest something that is perhaps environmentally friendly" (Thomas). Likewise, Christina mentioned that she had a colleague who teases her, when she is about to fly on vacation (Christina).

What is common in these response stories is that talking to others about responding to climate change is widespread among the participants, and that responding to climate change is talked about as having a social aspect, be it by sharing unpleasant feelings with others or by encouraging others to take action. Kamilla also mentioned that she and her social circle have an influence on each other, as to how they think and act in relation to climate change (Kamilla). In this sense, conversation can be understood as a way to develop a **sociological imagination** in relation to climate change:

> "Conversations are the site for exchange of information and ideas, for human contact, and for the building of community. They are also an important site for the creation of collective meaning-making and reality (Giddens 1991; Gamson 1992; Eliasoph 1998). Conversations can help people understand their relationships with the larger world or can obscure those relationships. They can engage the sociological imagination" (Norgaard 2011, 97–98).

Talking about climate change has previously been considered uncommon (Gundelach, Hauge, and Nørregård-Nielsen 2012; Norgaard 2011). Norgaard even notices that climate change was a conversation killer, in the interviews she did with Norwegians: "People gave an initial reaction of concern, and then we hit a dead zone where there was suddenly not much to be said, "nothing to talk about" (Norgaard 2011, 55). Based on the participants' stories, I argue that talking about climate change has become common, both in relation to experiences linked to climate change (as I have explored in chapter 6) and in relation to everyday life responses to the issue. The public and political debates on climate change must be considered in this development and, as I have shown in chapter 4, climate change has become an issue that is integrated into the grand narratives about Copenhagen as thus articulated in the local context.

Concluding remarks

In this chapter, I have explored how small stories about everyday life responses to climate change may enhance understandings of climate challenges. Based on the young Copenhageners' small stories, I conclude that responding to climate change in everyday is entangled in ambivalences and uncertainties and that climate change responses are related to and challenged by various constrains in everyday life, making everyday life responses inadequate to the global issue.

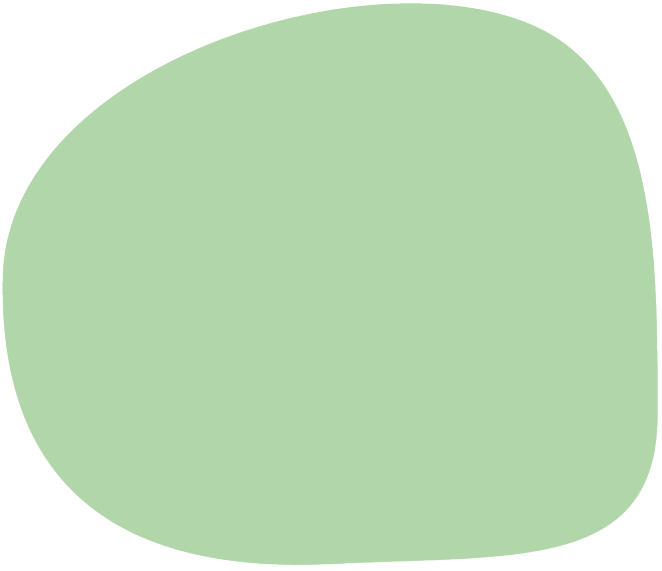
As opposed to previous studies I find that climate change is an issue that the participants in this research talked about without difficulties and that talking about climate changes with others can be understood as a way to deal with the unpleasant phenomenon.

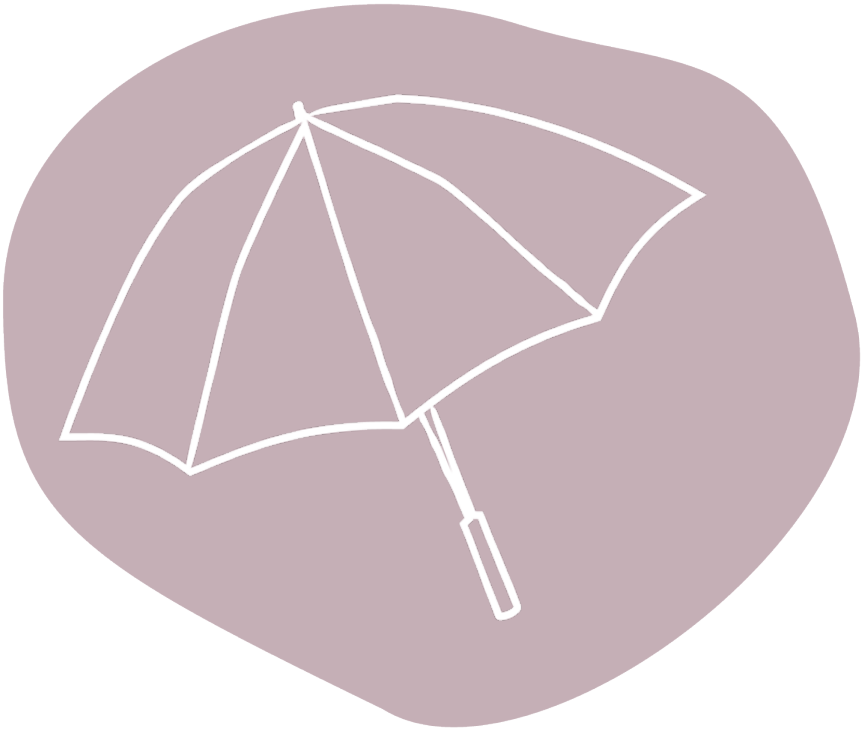
Responding to climate change in everyday life is not solely a matter of rational choices of the individual. Instead, how climate change is dealt with and responded to must be understood in relation to the individuals' everyday life habits, relations with others and ideas about, for instance, what makes a good life. Responding to climate change is talked about as important and as something that is incited by the young Copenhageners' knowledge about and experiences with climate change. In everyday life, responding to climate change is often talked about as done "as far as possible", because of various constraints.

I have pointed out three challenges for individual everyday life responses to climate change: The concurrent **knowing and not knowing**, **pragmatic everyday life responses to a global issue** and discussions about **individual and collective responsibilities**. In other words, the young Copenhageners talked about their everyday life ac-tions as related to climate change, but they expressed that they are not certain about the impact of their responses, that they respond to climate change, but only to a certain de-gree and that they consider others to have a greater responsibility than them.

The young Copenhageners' small stories about responding to climate change in everyday life concern both ideas about how many little things add up to a lot, and reflections about whether it matters to take individual action.

An opening seems to be when the so-called climate-friendly choice is the easiest, health-iest, cheapest or in other ways most accessible. This is something that the City of Copen-hagen has worked extensively with in terms of bicycling strategies.





Chapter 8

Conclusions

Doing research and constructing a thesis is somewhat similar to patchwork quilting (Flannery 2001; Koelsch 2012; Saukko 2000). With this chapter, I close the thesis by connecting the research questions with the thesis' chapters and contributions. In other words, I stitch together the front, back and batting of the patchwork.

Through the thesis, I have explored what can be learned from how climate change is talked about in everyday life in Copenhagen. I have argued that **small stories**, the often-overlooked ways of talking about an issue, hold significant contributions to how climate challenges are dealt with in research and in practice, as they entail nuanced and sometimes opposing accounts of the meaning-making of climate change in everyday life. In this chapter I recapitulate how I have answered the research question and sub-questions through the thesis. I then present the main contributions of the thesis and end the chapter by discussing how the questions that emerged through the process can inspire future work on the role of climate change in everyday life and possible openings for change. The guiding research question has been:

How do young Copenhageners talk about climate change, and how can an analytical exploration of this everyday talk contribute to understandings of climate challenges?

This overall guiding question was complemented by three sub-questions that have enabled an unfolding of various aspects of the research.

Through an abductive research design, I have explored how a group of Copenhageners talk about climate change. I have focused the research on a demographic group that I have termed young Copenhageners, Copenhageners of the age 20-39. This group is interesting for purposes of research on everyday life meaning-making of climate change, as they are in a transitional phase of their lives and all live in the same particular time and place (Halkier 1999; Illeris et al. 2009; Murray and Järviluoma 2020). Combining various qualitative methods, I have explored in detail how these young Copenhageners talk about climate change. I have done this to enhance understandings of climate challenges.
I have conducted **20 qualitative interviews** with a total of 21 young Copenhageners. I have combined the **semi-structured in-depth interviews** (Kvale 1996) with elements of the methods **photo elicitation** (Harper 2002) and **walk-along** (Kusenbach 2003). Through an abductive research strategy I developed an analytical categorisation that some of the young Copenhageners discussed in **two online focus groups** (Abrams and Gaiser 2017; Halkier 2018). To frame the analysis of the young Copenhageners' small stories about climate change in the context of Copenhagen and the grand narratives about climate change in Copenhagen, I have conducted an **expert interview** with a senior administration officer from the City of Copenhagen and **analysed municipal documents** (Kvale 1996; Lynggaard 2015).

Climate change has moved from being dealt with primarily in natural scientific research to being considered an issue that interferes with social lives to an extent that makes social scientific research on climate change an equally important field (Beck 2016; Norgaard 2016; Urry 2011). The sociological perspective in general and the sociological concepts **the sociological imagination** and **ecological imagination** in particular, allow research to focus on the relations between individuals and societies as well as their physical surroundings (Mills 2000; Norgaard 2018). Inspired by the idea of such connectedness between everyday life experiences and global issues, I have asked how we might learn from the ways that climate change is talked about in daily life.

The everyday life perspective offers nuances to climate change research of how a global phenomenon is experienced and made sense of in a situated context (Norgaard 2011). Previous social scientific research has found climate change to be a distant phenomenon in everyday life in the Global North, and this distance has been described as one explanation for the insufficient public responses to the global threat, in that the intangible and distant character of the phenomenon has made it difficult to grasp and respond to (Beck 2009; Giddens 2011; Gundelach, Hauge, and Nørregård-Nielsen 2012; Norgaard 2011; Urry 2011). Two previous sociological studies have analysed the role of climate change in Scandinavian everyday life (Gundelach, Hauge, and Nørregård-Nielsen 2012;

Norgaard 2011). Both studies concluded that climate change was a phenomenon that respectively Norwegians and young Danes knew of and were worried about. However, the studies concluded that the complex character and unpleasant implications of climate change made it difficult for people to take action (Gundelach, Hauge, and Nørregård-Nielsen 2012) and that a **socially organised denial** enabled a collective sense of "everything is fine" (Norgaard 2011).

Today, climate change has a strong presence in Danish political and public debates, in the media and in all levels of planning, following a decade or so with occurrences of extreme weather phenomena as well as increased precipitation and temperatures which have been related to global changes in the climate (Danish Meteorological Institute 2020a). According to two recent surveys, most Danes still consider climate change to be a serious problem to worry about (Concito 2020; Rambøll 2019). Initiating this research, I found this gap in the research field, and I set out to fill it by exploring how climate change is talked about today and how this can contribute to understandings of the climate challenges, almost a decade after the publication of these two studies (Gundelach, Hauge, and Nørregård-Nielsen 2012; Norgaard 2011).

I have explored the everyday talk about climate change through the concept **small stories**, an empirically founded concept that I have developed to emphasise the importance of the often-overlooked kinds of everyday talk about an issue. Small stories are the fleeting, but detailed accounts about an issue, often concerning present, past, future and possible events related to an issue. Small stories are important for climate-change related research and planning, as they reflect what is taken for granted and what is considered challenging about an issue. Small stories are both particular and typical and can widen understandings of the difficulties of making sense of and responding to climate change in everyday life. Small stories contribute to understandings of climate challenges as they reflect challenges and dilemmas in everyday life engagements in climate change.

I have developed the small stories concept to analytically encompass the richness and details in the participants' narrative accounts. As mentioned in the introductory chapter, I have developed the concept building on the works of others, especially Freudendal-Pedersen's (2007, 2016b) **structural stories**. Small stories are relatives of structural stories, and they fall somewhere between the condensed structural stories and the long ethnographic or anthropological fieldwork representations (e.g., Geertz 1973). With small stories I emphasise the importance of the concurrent particularities and typicalities of how climate change is talked about (Delmar 2010). Whereas structural stories are condensations of common stories about an issue (Freudendal-Pedersen 2016b), small stories are detailed accounts that reflect what is taken for granted and found challenging about

an issue and can point to possible openings for change. The details of small stories supplement the structural aspect of structural stories, and the two are complementary.

Small stories are related to grand narratives, the cultural or institutional stories told about an issue (Thomsen, Bo, and Christensen 2016). Small stories sometimes echo grand narratives, but small stories are difficult to find in grand narratives. Staying in the metaphorical world of climate change, grand narratives can be understood as rain falling, and small stories the following upward evaporation, which leave little visible impact. Engaging in small stories can, however, point to important aspects, nuances and contradictions that are not part of the grand narratives.

By exploring the small stories in detail, I conclude that climate change is talked about as both near and distant in everyday life and that the issue is shrouded in uncertainties. Climate change is talked about as a phenomenon that is experienced in a both sensory and bodily manner as changes in the weather and more indirectly as experiences with changes in the city. In addition to the small experience stories, climate change evokes small response stories. These response stories show that climate change is talked about as an issue that incites the young Copenhageners to take climate action, most often through individual responses most commonly related to everyday life consumption and movement.
I have explored small stories about climate change in everyday life, but the concept is applicable to other fields and can be useful in urban planning to explore overlooked everyday life perspectives in various aspects of a city's or municipality's planning work.

In the second chapter, **Doing the research: Materials and methods**, I have presented the empirical materials and the methodological choices I have made, in order to enhance the transparency of the research. In acknowledgement of methods as integral to the analyses and conclusions in research, I have combined various qualitative methods to explore both verbal, sensory and bodily aspects of climate change in everyday life. The combination of individual interviews and focus groups enabled me to explore everyday life talk about climate change in detail, in both an individual and interactive setting and has widened the scope of the research, as the different methods evoked different aspects.

Based on a theoretically informed understanding of climate change as a **messy**, **wicked** or **super wicked** issue (Fischer and Gottweis 2012; Levin et al. 2012; Rittel and Webber 1973), I took an exploratory approach to the research and mostly based the interview guide for the individual interviews on open-ended questions (Brinkmann 2018; Kvale 1996). My exploratory approach was linked to the thesis' abductive research design which

has made it possible to approach the field with an openness to the young Copenhageners' ways of talking about climate change and to themes that came up in the individual interviews (Alvesson and Sköldberg 2018; Blaikie 2011). This openness to the empirical materials has resulted in the categorisation of the thesis' analytical chapters: Small stories about experiences and responses to climate change, respectively

I have approached the research with sociological concepts and a disciplinary openness inspired by my own background as well as the complex and border-crossing character of climate change. As such, I have primarily made use of sociological concepts in the analyses, but have also drawn on concepts and ideas from other disciplines. In chapter 3, **Sociologies of climate change**, I have answered the first sub-question: How can sociological discussions on climate change contribute to understandings of everyday talk about the issue? Through a review of discussions and developments in sociological engagements in climate change, I have developed a categorisation of four waves, namely climate change as **a social issue**, **a construction**, **a risk** and **a condition for contemporary everyday life**. These successive, but somewhat overlapping four waves in sociological discussions about climate change help the understanding of how sociological ideas have moved from talking about the physical surroundings of Earth as a backdrop for social life, to climate change as an inevitable condition in everyday life. The first two concern the formulation of how sociology have dealt with and can deal with climate change and the latter two have inspired the ontological and epistemological roots of the thesis.

The four waves in chapter 3 form the basis of chapter 5, **Theoretical framework**, in which I have presented the theoretical concepts and perspectives that I make use of in the analysis of the young Copenhageners' small stories about climate change. I have made use of various concepts that have enabled an analytical exploration of the details and nuances in the stories. With inspiration from Kari Norgaard's (e.g.; 2011, 2018) distinctions of the concepts **ecological imagination** and **sociological imagination**, I have presented a somewhat eclectic theoretical framework that has enabled the interpretations of the small stories. The concepts **weathering** (Ingold and Kurttila 2000; Madzak 2020; Vannini et al. 2012), **ontological security** (Freudendal-Pedersen 2016b; Giddens 1997; Norgaard 2011), **social scare** (Ungar 1992), **literal, interpretive and implicatory denial** (Cohen 2001; Norgaard 2011), **care** (Moriggi et al. 2020; Tronto 2017), **information deficit model** (Bulkeley 2000; Burgess, Harrison, and Filius 1998) and **response-abilities** (Freudendal-Pedersen 2014; Zeitler 2008) form the theoretical framework of the analysis. Because of the variety and nuances of the small stories, the analytical explanation of these calls for a theoretical framework that is based on a disciplinary openness, and I draw on concepts from sociologists, anthropologists, geographers, mobilities researchers

and feminist thinkers. In addition to the concepts presented in the framework, I have added some concepts directly in the analytical chapters.

Chapter 4, **The staging of climate change in Copenhagen**, contains the contextual framing of the analysis of the young Copenhageners' small stories. In this chapter I have answered the second sub-question: How does the City of Copenhagen stage climate change? In order to describe how climate change has become an issue for urban planning, I have initially outlined how cities have come to be understood as important actors in climate change response action, partly because of the lack of tangible results from nation-based collaboration on climate action as well as the rapid urbanisation. In the past decades, cities worldwide have started to take climate action, and Copenhagen is no exception. Copenhagen is an interesting context to study climate change in, as the City of Copenhagen has worked strategically with climate change for more than a decade and has become internationally renowned for combining sustainability and liveability.

Based on an understanding of urban planning and everyday life as mutually constitutive (Jensen 2013), I have focused on the everyday life perspectives of a group of young Copenhageners. I understand the planning of the city and the everyday life in it as mutually influential, and how climate change is staged in Copenhagen is thus important for the analysis of everyday life small stories about the issue. With help from Jensen's (2013) concept of staging, I have shown that climate change is staged as an opportunity for Copenhageners and the city's development as well as it is staged as a risk.. Climate change is integral to the city's development plans, and the formulations of climate change are based on the possibilities for added value and liveability, when developing and implementing climate change related initiatives. This is visible in the city's grand narratives about Copenhagen as a green and liveable city as well as a green pioneer city.

In Copenhagen, climate change has become essential in the City's strategic development, partly helped along by the occurrence of particular cloudbursts that actualised the issue in both the public and political system and accelerated the political processes. The City of Copenhagen works with climate change through the three approaches **mitigation**, **adaptation** and **collaboration**. The first two are internationally acknowledged specific climate-related strategies used in municipal, national and international work. The City of Copenhagen's overall mitigation aim is to become carbon neutral by 2025 (City of Copenhagen 2012b). In addition to focus areas that are somewhat invisible in the everyday life of Copenhageners, the promotion of green mobility and waste sorting are two key mitigation strategies addressed at the Copenhageners. Adaptation strategies in Copenhagen generally concern the management of water, such as preparing the city for a

general increase in precipitation, cloudbursts and increasing sea levels. Through the idea of added value in adaptation projects, climate change adaptation is incorporated in the city's development. The third approach, collaboration, is my contribution. Collaboration, I argue, is fundamental for how climate change is staged in Copenhagen, as the fulfilment of the city's visionary aims depend on the participation of citizens, companies, organisations and institutions. Further, the City has a strong international outlook and participates in national and international partnerships and networks. Collaboration has a long history in Danish urban planning, and in the City of Copenhagen's climate-related work, collaboration is crucial in both mitigation and adaptation approaches, as the City's aims are contingent on the participation of the Copenhageners and other actors. In addition, climate-change related planning work is considered a complex and relatively new issue for urban planning, and the City of Copenhagen collaborates in national and international city networks to share knowledge and learn from other cities.

In chapters 6 and 7, respectively, **Small stories about climate change experiences** and **Small stories about everyday life responses**, I have explored the young Copenhageners' small stories in detail. Over these two chapters, I have answered the third subquestion: How do young Copenhageners talk about climate change? With the empirically founded analytical categorisation of small experience stories and small response stories, I have scrutinised what can be learned from the ways that climate change is talked about. Although the young Copenhageners lived in two different neighbourhoods, the small stories told across the two neighbourhoods do not differ significantly, and I understand that the meanings ascribed to the neighbourhood are focused on various ideas of the sense of the neighbourhood, rather than geographic location alone.

In chapter 6, I have engaged in the young Copenhageners' small stories about experiencing climate change. As opposed to how climate change has previously been considered distant in everyday life, I conclude that the issue is talked about as both near and distant, in other words both as a risk and as a condition in Copenhagen. The young Copenhageners talked about climate change as a diffuse umbrella term, a term that they use to cover a range of processes and issues, both specific and abstract and both present and future events. Likewise, the participants used the terms **environment**, **climate change**, **global warming** and **climate crisis** when they talked about the issue. Instead of understanding these as misunderstandings, I argue that they can be interpreted as examples of how the various phenomena are considered related in everyday life.

Climate change experience stories cover both experiences with changes in the city, such as noticing municipal mitigation or adaptation initiatives, and experiences with changes in seasons and the weather. The weather and seasons are not merely backdrops to everyday life, but entangled with it (Madzak 2020; Vannini et al. 2012). Changes in the weather

and seasons can be understood as threats to the **ontological security** (Freudendal-Pedersen 2016b; Giddens 1997; Norgaard 2011). Unusual weather events such as a heavy cloudburst, and unexpected changes in seasons, such as the drought summer of 2018 and warmer temperatures in general, are talked about in relation to climate change and possible climate futures. Changes in seasons and the weather challenge what is taken for granted in everyday life, and are talked about as evoking unpleasant feelings of worry and fear.

The weather is considered a common topic for everyday life small-talk in Denmark and countries with similar weather conditions and has been considered a safe and light conversational topic (Madzak 2020; Norgaard 2011). With the occurrence of unexpected changes in the weather, talking about the weather has become related to climate change and the relations between specific events and knowledge about the global issue.

All the young Copenhageners seemed to acknowledge the existence of anthropogenic climate change, but the issue was shrouded in uncertainties when talked about, ranging from uncertainties about the relations between a specific weather event and global climate change to what can be understood as expressions of **implicatory denial** (Cohen 2001), such as narrative accounts about Denmark as a place that will not be altered by climate change. Changes in the weather and in the seasons are talked about as intensified versions of known phenomena; summer that has been extended or more rain falling than usual. This, I argue, can be explanatory as to why there is much uncertainty about what is and is not climate change.

The second analytical chapter is chapter 7, in which I have explored the young Copenhageners' small stories about everyday life responses to climate change. Responding to the global issue in various ways was something that all participants talked about. With the sociological everyday life perspective in mind, this can be understood as an example of how the young Copenhageners try to make meaning of climate change, an unpleasant and immense threat to the sense of ontological security (Bech-Jørgensen 1994; Giddens 2011; Gundelach, Hauge, and Nørregård-Nielsen 2012; Norgaard 2011; Schutz 1971). The small response stories are crucial for the understandings of the challenges of individual everyday life **response-abilities** (Freudendal-Pedersen 2014; Moriggi et al. 2020; Zeitler 2008) and can point to openings for future climate-related planning initiatives. Further, these small stories about responses can be understood in relation to the ability to relate to the impact of human actions, **the ecological imagination** (Norgaard 2018). Narrative accounts about everyday life responses most commonly relate to various mundane situation that entail a kind of choice, ranging from small-scale decisions about what

to eat or buy to larger decisions related to planning the future, such as what house to buy or whether to attempt having another child. In most cases, responding to climate change is talked about as making the best or most **climate-friendly** choice in everyday life situations (Boström and Klintman 2019; Gundelach, Hauge, and Nørregård-Nielsen 2012). Most of the small response stories concern reflections about individual rather than collective response actions. This resonates with the long history of placing responsibility for solving environmental issues and the problem of climate change on individuals (Boström and Klintman 2019; T. H. Christensen et al. 2007; Halkier 2016). However, several of the participants expressed frustration with the uncertainties about the impacts and called for political action and legislation changes.

I have pointed out three challenges to individual everyday life response-abilities, based on the participants' small response stories: **Knowing and not knowing**, **pragmatic everyday life responses to a global issue** and **an individual or collective responsibility?** The three each represent an aspect of the incongruence between individual action and global climate change. Previous scientific attempts to explain the insufficient public responses to the issue have argued that people do not know enough, and if they only did, they would act accordingly. However, others have argued that it is not a **deficit of information** that hinders climate action (Bulkeley 2000; Burgess, Harrison, and Filius 1998). Likewise, the insufficient response has been ascribed to inadequate individual caring (Norgaard 2011). Based on the young Copenhageners' small stories about climate change, I cannot conclude that the young Copenhageners do not know or care enough about the issue. Their narrative accounts do not contain much of what has been termed **literal denial** (Cohen 2001; Norgaard 2011). Rather, the small stories include various expressions of knowing about climate change while not knowing what measures to take or what impact certain choices have, making pragmatic choices in order to uphold one's everyday life and frustrations and discussions about the individual versus collective responsibility of climate change. The young Copenhageners seem to want to respond to the global issue, but have limited response-abilities in everyday life. This conclusion opens up questions about how the possibilities of responses can be improved or widened.

Concluding chapter 7, I have discussed possible openings for change. The City of Copenhagen has done much work to promote "climate-friendly" alternatives and make these easier for Copenhageners to choose. This has particularly been the case with the promotion of green mobility through campaigns and the expansion and development of bicycle infrastructure in the city (City of Copenhagen 2020b; Freudendal-Pedersen 2015a). Several of the young Copenhageners talked about how they ride their bikes, not because it's the most climate-friendly mode of transportation, but because of the convenience and ease of cycling, compared to other ways of moving through the city. In the case of cycling, the City of Copenhagen has succeeded in making the green alternative to

driving a car the easiest and most convenient option. What does this mean for the possibilities of other areas that might be approached in a similar vein? And how might research engage in such endeavours? These are questions that I cannot answer here, but I raise them to inspire further engagement in the issue.

The thesis' contributions to research and practice

Summing up, the main contributions of the thesis are twofold.
The first contribution is that the presence of climate change in everyday life can no longer be understood as distant, but as a phenomenon that is concurrently talked about as near and distant, and that knowledge about and previous experiences related to climate change incite individuals to respond to the issue in everyday life.

The presence of climate change in everyday life in Copenhagen can be understood as a phenomenon that concurrently builds on various experiences and calls on responses. Based on the participants' narrative accounts, I conclude that in everyday life, climate change is narrated as a diffuse umbrella term that encompasses both locally experienced and tangible phenomena and distant complex processes. Further, climate change is not solely talked about as a physical phenomenon or processes in Earth's systems. The small stories also include reflections about actions to take in response to the phenomena, the responsibilities of various actors and limited individual response-abilities and the challenges related to responding to climate change in everyday life.

Much previous social scientific research on climate change and everyday life has concluded that climate change has been considered an issue of the future, distant from the everyday lives of people in the Global North, which made it difficult to relate and respond to. Distance has been considered an explanatory aspect in the lack of sufficient responses to the issue. This thesis' empirically grounded analysis of small stories about climate change contributes to the existing research with the addition that climate change must be understood as both near and distant in contemporary everyday life in Copenhagen. The young Copenhageners' small stories entail descriptions and reflections about climate change as not solely a phenomenon of the future, but also a phenomenon that is experienced in the here and now in everyday life in Copenhagen.

Climate change has a strong presence in everyday life for the young Copenhageners participating in this research project. Climate change is not only talked about as a risk or

as the anticipation of future events, but is also as currently experienced and noticed. Not as life-changing catastrophes, but as unusual weather events, seasonal changes and changes in the city.

Climate change experiences are related to other everyday life experiences and take form as both bodily experiences, such as sensing changes in the seasons or experiencing extreme weather phenomena, and reflexive associations made in various everyday life situations. This might be an opening to future policy development, as it broadens the idea of what we understand by lived experiences with climate change to not only encompass bodily experiences. Further, sensory and bodily experiences with unusual weather events can be understood as a wakeup call or a **social scare** (Ungar 1992) that actualise the need for climate action, as the sense of **ontological security** is threatened (Giddens 2011; Norgaard 2011). However, only two participants in this research mentioned the term **climate crisis**. One interpretation of this is that the sense of ontological security is not altered completely among the young Copenhageners. Another interpretation is that, as I have mentioned, this may be due to my choice of wording in that I asked the participants to talk about the term climate change. This would be interesting to explore further.

Experiencing and responding to climate change in everyday life cannot be sharply defined as either one or the other. Instead, we must understand both lived experiences and responses to climate change as both the one and the other. In other words, everyday life experiences with and responses to climate change are multiple.

The second contribution concerns the **small stories approach** that I have developed and applied to the research. With the small stories approach, this thesis contributes to climate change research with the argument that the everyday life perspective on climate change is different from, but necessarily complementary to, climate change research and climate-change focused planning work.

The participants in this research did relate experiences in their daily lives with global issues – very much so – but they expressed struggles and insecurities about how to respond as well as frustrations about the lack of institutional and political action taken. The young Copenhageners expressed a rich **ecological imagination** and frustration over the lack of political action that they experience and also their insecurities about what to do, the **sociological imagination** (Norgaard 2018). Looking across the young Copenhageners' response stories, the most common areas of action mentioned relate to eating and consumption. That these tangible and small areas are in the global sense the most common can be understood as an example of the limited individual everyday life response-abilities when it comes to the global issue of climate change. My reading of the

young Copenhageners' small stories is that these people seem to do what they can, because they feel incited to respond to an unpleasant and severe threat, but that the room to manoeuvre for responding is limited to individual consumption habits.

I have focused the research on a group of young adults living in Copenhagen. In relation to climate change, young adults in the Global North have been considered either "wasteful and hedonistic consumers" or "environmental heroes", although such a dualistic distinction is too simplistic (Stanes and Klocker 2016). In this research I have approached the group of somewhat privileged young adults with "a double view of compassion and critique", as suggested by Norgaard (2011). This has enabled an exploration of the nuances of the challenges in everyday life climate change responses.

I have pointed out three challenges for everyday life responses to climate change and argued that the everyday life response-abilities of individuals are challenged by the processes of knowing and not knowing how to respond, the incongruence between the sometimes pragmatic everyday life responses and the global issue and the diffusions of individual or collective responsibility. I have pointed out these three challenges that emphasise the incongruence between individual room to manoeuvre and the extent of the global issue. What the young Copenhageners' small stories point to are the many difficulties, ambivalences and negotiations that enable some kinds of response and hinder others. Drawing on the concept of **response-abilities** (Freudendal-Pedersen 2014; Zeitler 2008), the lack of sufficient response to global climate change cannot be understood as merely a questions of individual apathy, refusal to acknowledge the issue or making egoistic choices, but rather that everyday life responses to climate change are challenged by the dependency on systems, for instance in relation to infrastructure, public utility, food supply and legislation. Small stories are crucial for climate change understandings for research and (planning) practice as they make visible some of the challenges of confined individual response-abilities.

Where to next? Thoughts on future research

As I have stated in the introductory chapter, I do not conclude this thesis with a single theory of climate change in everyday life. Instead, I have pointed to challenges and asked questions that the conclusions of the research have spurred. As the research process has been an exploration and construction of knowledge in dialogue with the material, some

questions have been answered and new informed questions have occurred. As such, although the work with this thesis now comes to an end, there is still much to explore and study in relation to climate change, everyday life, experiences and response-abilities.

I have focused on the young Copenhageners, a group of people that, although none of them talked about having drastically transformed their lives because of climate change, all said that they respond to the issue in various ways in their daily lives. Copenhagen is a city in which massive attention is put on climate change and questions of sustainability measures, and this is echoed in the stories told by the Copenhageners. However, as I understand the context of everyday life to be essential for how issues like climate change is talked about, future research on small stories about climate change may with advantage focus on other urban or rural contexts where **socially organised kinds of denial** might be more present (Norgaard 2011). Such exploration can relate to small stories told in various contexts as well as how and why different kinds of socially organised denial are developed and what feed them.
Am I to continue researching climate change in everyday life, I will add another layer to the sewing kit, the fifth wave of sociologies on climate change, **climate change as injustice** (e.g.; Sheller 2020)**,** and focus on the unequal differences in climate change experiences and responses in various places by people belonging to one or more minorities.

The exploratory approach that I have taken has led to the categorisation of climate change talked about as experiences and as a phenomenon that incites responses. The thesis' analyses therefore cover a wide range of aspects. Everyday life is a large arena that encompasses many actions, situations and relations. With my exploratory approach, I have deliberately focused broadly. There are pros and cons to this kind of analytical approach and focus, and future research could benefit from focusing on some of these situations and actions in detail, for instance how climate change response-abilities are talked about in relation to the consumption of meat – a topic that most of the young Copenhageners talked about. However, there is only so much room to manoeuvre and only limited options for what individuals can put on the plate. Keeping the conclusions from chapter 7 in mind, changing the research perspective of this area is an option: The research questions could relate to how municipalities or other institutions might take part in promoting climate-friendly alternatives to meat consumption, based on the experience of promoting climate-friendly alternatives to cars.

The term climate change was talked about as a diffuse umbrella term used in relation to a wide span of phenomena in everyday life, such as local weather events, current and possible social consequences and uncertain futures. I found the term to be talked about with no clear definition, as opposed to the scientific use of the term. I have not explored

the implications of the different associations of climate change in the everyday life context, but an exploration of the various meanings attached to the term could enrich understandings of the role of climate change in everyday life.

The patchwork quilt has been my companion through the process of writing this thesis. The metaphor has inspired the research process as well as the construction of the written thesis. Thinking with the patchwork quilt in mind has helped me to make sense of the research process and to construct the thesis as a composition of various parts and patches. In line with the metaphor, these conclusions are the final assembling of the work I have done these last years. With these stitches, I assemble lines of thought and fasten the analyses and various layers in the work. As a patchwork quilt, this thesis can be appreciated as is or parts can be used in future work. These words mark the closure of this written product, but small stories about climate change deserve further exploration.

References

Abbott, Dina, and Gordon Wilson. 2015. *The Lived Experience of Climate Change: Knowledge, Science and Public Action*. Cham: Springer International Publishing.

Abrams, Katie M., and Ted J. Gaiser. 2017. "Online Focus Groups." In *The SAGE Handbook of Online Research Methods*, eds. Nigel G. Fielding, Raymond M. Lee, and Grant Blank. London: SAGE Publications Ltd, 435–49.

Ahmed, Sara. 2017. *Living a Feminist Life*. Durham and London: Duke University Press.

Alvesson, Mats, and Kaj Sköldberg. 2018. *Reflexive Methodology, New Vistas for Qualitative Research*. Third edit. Los Angeles: Sage.

Ambrose, Jillian. 2020. "Denmark to End New Oil and Gas Exploration in North Sea." *The Guardian*. https://www.theguardian.com/business/2020/dec/04/denmark-to-end-new-oil-and-gas-exploration-in-north-sea.

Andersen, John, and Gestur Hovgaard. 2010. "Metodekombination Med Sociologisk Fantasi." In *Teknikker i Samfundsvidenskaberne*, eds. Lars Fuglsang, Peter Hagedorn-Rasmussen, and Poul Bitsch Olsen. Frederiksberg: Roskilde Universitetsforlag, 103–21.

Angelo, Hillary, and David Wachsmuth. 2020. "Why Does Everyone Think Cities Can Save the Planet?" *Urban Studies* 57(11): 2201–21.

ARC. 2021. "Amager Bakke - Hovedstadens Vartegn." https://a-r-c.dk/amager-bakke/ (May 18, 2021).

Bateson, Gregory, and Margaret Mead. 1962. *Balinese Character - A Photographic Analysis*. New York, New York: The New York Academy of Science.

BBC. 2019. "'OK Boomer': 25-Year-Old New Zealand MP Uses Viral Term in Parliament." https://www.bbc.com/news/world-asia-50327034.

Bech-Jørgensen, Birthe. 1994. *Når Hver Dag Bliver Hverdag*. København: Akademisk Forlag.

Beck, Ulrich. 2009. *World at Risk*. Cambridge: Polity Press.

———. 2010. "Climate for Change, or How to Create a Green Modernity?" *Theory, Culture and Society* 27(2–3): 254–66.

———. 2016. *The Metamorphosis of the World*. Cambridge: Polity Press.

Beck, Ulrich, and Anders Blok. 2016. "Cosmopolitan Communities of Risk: From United Nations to United Cities." In *The Metamorphosis of the World*, ed. Ulrich Beck. Cambridge: Polity Press.

Becker-Schmidt, Regina. 1982. "Modsætningsfyldt Realitet Og Ambivalens: Kvinders Arbejdserfaringer i Fabrik Og Familie." *Udkast* 10(2): 164–98.

Bee, Beth A., Jennifer Rice, and Amy Trauger. 2015. "A Feminist Approach to Climate Change Governance: Everyday and Intimate Politics." *Geography Compass* 9(6): 339–50.

Beebeejaun, Yasminah. 2017. "Gender, Urban Space, and the Right to Everyday Life." *Journal of Urban Affairs* 39(3): 323–34.

Bennetsen, Nina Moesby. 2019. "Living in the Climate Crisis : Exploring Situated Perspectives and Openings for Change through Everyday Life Stories." *Politik* 3(22): 83–98.

Bennetsen, Nina Moesby, and Katrine Hartmann-Petersen. "Mobilities Policies. Exploring Momentums as Urban Tipping Points in Practice." In *Handbook of Methods and Applications for Mobilities Research*, eds. Malene Freudendal-Pedersen,

Sven Kesselring, and Monika Büscher. Edward Elgar Publishing.
Bennetsen, Nina Moesby, and Julie Overgaard Magelund. 2015. "Hverdagshåndteringer - En Undersøgelse Af Bæredygtighed Og Mobilitet i Hverdagslivet." Roskilde Universitet.
Berg, Rasmus Kehlet, Anette Høite Hansen, Ida Mangor, and Anne Bach Nielsen. 2019. "10 År Efter COP15: Samfundsvidenskabelige Perspektiver På Bæredygtig Udvikling." *Politik* 22(3): 1–6.
Berger, Peter L., and Thomas Luckmann. 1989. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York, New York: Doubleday.
Berthou, Sara Kristine Gløjmar. 2013. "The Everyday Challenges of Pro-Environmental Practices." *The Journal of Transdisciplinary Environmental Studies* 12(1).
Berthou, Sara Kristine Gløjmar, and Betina Vind Ebbesen. 2016. "Local Governing of Climate Change in Denmark: Recasting Citizens as Consumers." *Journal of Environmental Planning and Management* 59(3): 501–17.
Betsill, Michele, and Harriet Bulkeley. 2007. "Looking Back and Thinking Ahead: A Decade of Cities and Climate Change Research." *Local Environment* 12(5): 447–56.
Bhatasara, Sandra. 2015. "Debating Sociology and Climate Change." *Journal of Integrative Environmental Sciences* 12(3): 217–33.
Bisgaard, Holger. 2010. *Københavns Genrejsning 1990-2010*. Copenhagen: Bogværket.
Blaikie, Norman. 2011. *Approaches to Social Enquiry : Advancing Knowledge*. 2nd. Cambridge: Polity Press.
Blok, Anders. 2012. "Et Nyt Klima for Sociologien?" *Dansk Sociologi* 1(23): 9–28.
———. 2019. "Natur, Miljø Og Klima Som Samfundsproblemer." In *Sociologiens Problemer: En Grundbog*, eds. Anders Blok and Carsten Bagge Laustsen. Copenhagen: Hans Reitzels Forlag.
Bo, Inger Glavind. 2016. "Den Narrative Tilgang - Erkendelsesmåder Og Identitetsforståelser." In *Narrativ Forskning: Tilgange Og Metoder*, eds. Inger Glavind Bo, Ann-Dorte Christensen, and Trine Lund Thomsen. København: Hans Reitzels Forlag, 35–55.
Booth, Michael. 2014. *The Almost Nearly Perfect People: The Truth about the Nordic Miracle*. London: Jonathan Cape.
Boström, Magnus, and Mikael Klintman. 2019. "Can We Rely on 'Climate-Friendly' Consumption?" *Journal of Consumer Culture* 19(3): 359–78.
Bowman, Benjamin. 2019. "Imagining Future Worlds alongside Young Climate Activists: A New Framework for Research." *Fennia* 197(2): 295–305.
Bradbury-Jones, Caroline, Sally Sambrook, and Fiona Irvine. 2009. "The Phenomenological Focus Group: An Oxymoron?" *Journal of Advanced Nursing* 65(3): 663–71.
Branner, Charlotte. 2016. "Generation Y: »Hvis Det Ikke Er Digitalt, Findes Det Slet Ikke«." *Politiken*. https://politiken.dk/forbrugogliv/forbrug/art5633469/Generation-Y-»Hvis-det-ikke-er-digitalt-findes-det-slet-ikke« (February 8, 2018).

Briggs, Helen. 2021. "What Is the Paris Climate Agreement and Why Did the US Rejoin?" *BBC*. https://www.bbc.com/news/science-environment-35073297.

Brinkmann, Svend. 2015. "Etik i En Kvalitativ Verden." In *Kvalitative Metoder: En Grundbog*, eds. Svend Brinkmann and Lene Tanggaard. København: Hans Reitzels Forlag, 463–79.

———. 2018. "The Interview." In *The Sage Handbook of Qualitative Research*, eds. Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks, California: SAGE, 576–99.

Brown-Saracino, Japonica. 2010. "Overview : The Gentrification Debates." In *The Gentrification Debates: A Reader*, ed. Japonica Brown-Saracino. Oxon: Routledge, 1–10.

Bulkeley, Harriet. 2000. "Common Knowledge? Public Understanding of Climate Change in Newcastle, Australia." *Public Understanding of Science* 9(3): 313–33.

———. 2010. "Cities and the Governing of Climate Change." *Annual Review of Environment and Resources* 35(1): 229–53.

———. 2013. *Cities and Climate Change*. Abingdon, Oxon: Routledge.

Burgess, Jaquelin, Carolyn M. Harrison, and Petra Filius. 1998. "Environmental Communication and the Cultural Politics of Environmental Citizenship." *Environment and Planning A* 30(8): 1445–60.

Büscher, Monika, John Urry, and Katian Witchger. 2011. "Introduction." In *Mobile Methods*, eds. Monika Büscher, John Urry, and Katian Witchger. Abingdon, Oxon: Routledge, 1–20.

By & Havn. 2020. *Tal Om By & Havn: Det Skal Være Let at Leve Bæredygtigt*. København. https://www.skyfish.com/p/byoghavn/1796145/47382130.

C40. 2021. "C40 Cities." https://www.c40.org/ (February 18, 2021).

Campbell, Scott D. 2016. "The Planner's Triangle Revisited: Sustainability and the Evolution of a Planning Ideal That Can't Stand Still." *Journal of the American Planning Association* 82(4): 388–97.

Cappelen. 2019. "Hvid Jul i Danmark." *Danmarks Meteorologiske Institut (DMI)*. https://www.dmi.dk/vejr-og-atmosfare/temaforside-hvid-jul-i-danmark/ (October 15, 2020).

Carlberg, Nicolai, and Søren Møller Christensen. 2005. *Byliv Og Havnefront*. København: Museum Tusculanums Forlag.

Carson, Rachel. 2000. *Silent Spring*. London: Penguin Group.

Carstensen, Kathrine. 2016. "Narrative Fortællinger Om Moderskab - Små Fortællinger Situeret Mellem Kanoniske Narrativer Og Individuel Hverdagspraksis." In *Narrativ Forskning: Tilgange Og Metoder*, eds. Inger Glavind Bo, Ann-Dorte Christensen, and Trine Lund Thomsen. København: Hans Reitzels Forlag, 221–38.

Catton, William R, and Riley E Dunlap. 1978. "Environmental Sociology: A New Paradigm." *The American sociologist* 13(1): 41–49.

Cele, Sofia. 2006. "Communicating Place: Methods for Understanding Children's Experience of Place." Stockholm University.

Certeau, Michel de. 1984. *The Practice of Everyday Life*. Berkeley: University of California Press.

Christensen, Ann-Dorte. 2009. "Scandinavian Everyday Life Sociologies: Routines, Ruptures and Strategies." In *Encountering the Everyday - An Introduction to the Sociologies*

of the Unnoticed, ed. Michael Hviid Jacobsen. Basingstoke: Palgrave Macmillan, 307–28.

Christensen, Toke Haunstrup et al. 2007. "Greening the Danes? Experience with Consumption and Environment Policies." *Journal of Consumer Policy* 30(2): 91–116.

City of Copenhagen. 2009a. *A Metropolis for People: Visions and Goals for Urban Life in Copenhagen 2015*. Copenhagen.

———. 2009b. *Københavns Klimaplan: København CO2-Neutral i 2025*. Copenhagen. https://kk.sites.itera.dk/apps/kk_pub2/index.asp?mode=detalje&id=833.

———. 2011. *Copenhagen Climate Adaptation Plan*. Copenhagen.

———. 2012a. *Cloudburst Management Plan 2012*. Copenhagen.

———. 2012b. *Cph 2025 Climate Plan: A Green, Smart and Carbon Neutral City*. Copenhagen.

———. 2012c. *KBH 2015 Klimaplanen: En Grøn, Smart Og CO2-Neutral By*. Copenhagen. http://kk.sites.itera.dk/apps/kk_pub2/index.asp?mode=detalje&id=930.

———. 2015. *Co-Create Copenhagen*. Copenhagen.

———. 2017a. *CPH 2025 Climate Plan: Roadmap 2017-2020*. København.

———. 2017b. *Hovedstaden for Bæredygtig Udvikling: Københavns Kommunes Handlingsplan for FN's Verdensmål*. Copenhagen. https://www.kk.dk/sites/default/files/uploaded-files/verdens_maal_cph_fin-ilovepdf-compressed_0.pdf.

———. 2018. *Århusgadekvarteret i Nordhavn: Lokalplan Nr. 463 Med Tillæg Nr. 1, 2 Og 3*. København.

———. 2019. *Circular Copenhagen: Resource and Waste Management Plan 2024*. København.

———. 2020a. *Copenhagen's Municipal Plan 2019: World City with Responsibility*. Copenhagen. https://kp19.kk.dk/sites/kp19.kk.dk/files/uploaded-files/kommuneplan_19_engelsk_03.pdf.

———. 2020b. *Cykelredegørelse 2020*. Copenhagen.

———. 2020c. *Status På København 2020*. Copenhagen. https://www.kk.dk/sites/default/files/status_paa_koebenhavn_2020.pdf.

———. 2021. "15. Forlænget Tidsplan Og Udvidet Idéoplæg for Omdannelse Af Området Ved Bispeengbuen (2020-0889700)." https://www.kk.dk/node/14117/26012021/edoc-agenda/a11a16bb-6521-453c-b63b-bd163f7a3911/d409b4d1-c36a-4293-a24f-b373a5c1e966 (May 29, 2021).

Clandinin, D. Jean. 2016. *Engaging in Narrative Inquiry*. Abingdon, Oxon: Routledge.

Clandinin, D. Jean, and F. Michael Connelly. 1994. "Personal Experience Methods." In *Handbook of Qualitative Research*, eds. Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks, California: SAGE Publications, Inc., 413–27.

———. 2000. *Narrative Inquiry: Experience and Story in Qualitative Research*. eds. D. Jean Clandinin and F. Michael Connelly. San Francisco: Jossey-Bass.

Clandinin, D. Jean, and Jerry Rosiek. 2007. "Mapping a Landscape of Narrative Inquiry: Borderland Spaces and Tensions." In *Handbook of Narrative Inquiry: Mapping a Methodology*, ed. D. Jean Clandinin. Thousand Oaks, California: SAGE Publications, Inc., 35–76.

Clark, Imogen, and Andrea Grant. 2015. "Sexuality and Danger in the Field: Starting an

Uncomfortable Conversation." *Journal of the Anthropological Society of Oxford Online* 7(1): 1–14.
Coffey, Amanda, and Paul Atkinson. 1996. *Making Sense of Qualitative Data: Complementary Research Strategies*. Thousand Oaks: SAGE Publications, Inc.
Cohen, Stanley. 2001. *States of Denial: Knowing about Atrocities and Suffering*. Cambridge: Polity Press.
Colucci, Erminia. 2007. "'Focus Groups Can Be Fun': The Use of Activity-Oriented Questions in Focus Group Discussions." *Qualitative health research* 17(10): 1422–33.
Concito. 2020. *Klimabarometeret 2020*. Copenhagen.
Crang, Mike. 2010. "Visual Methods and Methodologies." In *The SAGE Handbook of Qualitative Geography*, eds. Dydia DeLyser et al. London: SAGE Publications Ltd., 208–24.
Cresswell, Tim. 2008. "Place: Encountering Geography as Philosophy." *Geography* 93(3): 132–39.
———. 2015. *Place: An Introduction*. 2nd. Chichester: WILEY Blackwell.
Croghan, Rosaleen, Christine Griffin, Janine Hunter, and Ann Phoenix. 2008. "Young People's Constructions of Self: Notes on the Use and Analysis of the Photo-Elicitation Methods." *International Journal of Social Research Methodology* 11(4): 345–56.
Crutzen, Paul J. 2002. "Geology of Mankind." *Nature* 415(6867): 23.
Czarniawska, Barbara. 2010. "The Uses of Narratology in Social and Policy Studies." *Critical Policy Studies* 4(1): 58–76.
Damberg, Herdis Preil. 2018. "2018 - Det Mest Tørkeramte År i Danmark i 99 År." *Danmarks Meteorologiske Institut (DMI)*. https://www.dmi.dk/da/nyheder/2018/2018-det-mest-toerkeramte-aar-i-danmark-i-99-aar/ (October 14, 2020).
Danish Energy Agency. 2021. "Oil and Gas Are Important to the Danish Economy." https://ens.dk/en/our-responsibilities/oil-gas/about-oil-and-gas (January 7, 2021).
Danish Meteorological Institute. 2012. "2. Juli - et År Siden Det Københavnske Skybrud." https://www.dmi.dk/da/nyheder/2012/2-juli-et-aar-siden-det-koebenhavnske-skybrud/ (April 25, 2021).
———. 2018. *Vejret i Danmark - Sommer 2018*. https://www.dmi.dk/fileadmin/user_upload/Afrapportering/Saesonoversigter/sommer18.pdf.
———. 2019. *Året 2018*. https://www.dmi.dk/fileadmin/user_upload/Afrapportering/Aarssammendrag/Sammendrag_2018.pdf.
———. 2020a. "Klimaet i Danmark Frem Til Nu." *Danmarks Meteorologiske Institut (DMI)*. https://www.dmi.dk/klima-atlas/om-klimaatlas/klimaetidanmarkfremtilnu/ (February 28, 2020).
———. 2020b. "Vejret i Danmark Bliver Varmere, Vådere Og Vildere." *Danmarks Meteorologiske Institut (DMI)*. https://www.dmi.dk/klima-atlas/om-klimaatlas/vejretidanmarkblivervarmerevaadereogvildere/ (February 28, 2021).
Danish Ministry of Climate Energy and Utilities. 2020. "LOV Nr 965 Af 26/06/2020 (Gældende): Lov Om Klima." https://www.retsinformation.dk/eli/lta/2020/965.

Degen, Monica Montserrat, and Gillian Rose. 2012. "The Sensory Experiencing of Urban Design: The Role of Walking and Perceptual Memory." *Urban Studies* 49(15): 3271–87.

Deleuze, Gilles, and Felix Guattari. 2000. *Thousand Plateaus: Capitalism and Schizophrenia*. London: Continuum.

Delmar, Charlotte. 2010. ""Generalizability" as Recognition: Reflections on a Foundational Problem in Qualitative Research." *Qualitative Studies* 1(2): 115–28.

Denzin, Norman K., and Yvonna S. Lincoln. 1994. "Introduction: Entering the Field of Qualitative Research." In *Handbook of Qualitative Research*, eds. Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks, California: SAGE Publications, Inc., 1–18.

———. 2012. "The Discipline and Practice of Qualitative Research." In *The Landscape of Qualitative Research*, eds. Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks, California: SAGE Publications, Inc., 1–41.

———. 2018. "Introduction: The Discipline and Practice of Qualitative Research." In *Handbook of Qualitative Research*, eds. Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks, California: SAGE Publications, Inc., 1–26.

Doughty, Karolina, and Lesley Murray. 2016. "Discourses of Mobility: Institutions, Everyday Lives and Embodiment." *Mobilities* 11(2): 303–22.

Edensor, Tim. 2007. "Mundane Mobilities, Performances and Spaces of Tourism." *Social and Cultural Geography* 8(2): 199–215.

Egmose, Jonas. 2015. *Action Research for Sustainability: Social Imagination Between Citizens and Scientists*. Farnham: Ashgate.

Elliott, Robert, Constance T. Fischer, and David L. Rennie. 1999. "Evolving Guidelines for Publication of Qualitative Research Studies in Psychology and Related Fields." *British Journal of Clinical Psychology* 38(3): 215–29.

Eskjær, Mikkel Fugl. 2019. "Et Tabt Årti? Dansk Klimadækning Siden COP15." *Politik* 22(3).

Eskjær, Mikkel Fugl, and Mikkel Sørensen. 2014. "Introduktion - Humanistisk Klimaforskning." In *Klima Og Mennesker - Humanistiske Perspektiver På Klimaforandringer*, eds. Mikkel Sørensen and Mikkel Fugl Eskjær. Copenhagen: Museum Tusculanums Forlag, 11–26.

Esmark, Anders, Carsten Bagge Laustsen, and Niels Åkerstrøm Andersen. 2005. "Socialkonstruktivistiske Analysestrategier - En Introduktion." In *Roskilde Universitets Forlag*, eds. Anders Esmark, Carsten Bagge Laustsen, and Niels Åkerstrøm Andersen. Frederiksberg: Roskilde Universitetsforlag/Samfundslitteratur.

Fainstein, Susan S., and James DeFilippis. 2016. "Introduction: The Stucture and Debates of Planning Theory." In *Readings in Planning Theory*, eds. Susan S. Fainstein and James DeFilippis. Chichester: John Wiley & Sons, Inc., 1–18.

Federspiel, Søren, Karsten Skytte Jensen, and Jørgen Wenzel. 1997. *Nørrebro - Træk Af En Bydels Historie*. Copenhagen: Nørrebro Lokalhistoriske Forening og Arkiv & Knuths Forlag.

De Fina, Anna, and Alexandra Georgakopoulou. 2015. "Introduction." In eds. Anna De Fina and Alexandra Georgakopoulou. Chichester: WILEY Blackwell.

Fischer, Frank, and Herbert Gottweis. 2012. "Introduction." In *The Argumentative Turn Revisited. Public Policy as Communicative Practice*, eds. Frank; Fischer and Herbert Gottweis. Durham & London: Duke University Press, 1–27.

Fjalland, Emmy Laura Perez. 2019. "Rebellious Waste & Food: Searching for Reparative Futures within Urban-Rural Landscapes." Department of People and Technology, Roskilde University.

Fjalland, Emmy Laura Perez, Malene Freudendal-Pedersen, and Katrine Hartmann-Petersen. 2017. "Networked Urban Mobilities: Practices, Flows, Methods." In *Experiencing Networked Urban Mobilities*, eds. Malene Freudendal-Pedersen, Katrine Hartmann-Petersen, and Emmy Laura Perez Fjalland. New York, NY: Routledge, 1–9.

Flannery, Maura C. 2001. "Quilting: A Feminist Metaphor for Scientific Inquiry." *Qualitative Inquiry* 7(5): 628–45.

Flick, Uwe. 2018. "Triangulation." In *The Sage Handbook of Qualitative Research*, eds. Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks, California: SAGE, 444–61.

Flyvbjerg, Bent. 2006. "Five Misunderstandings About Case-Study Research." *Qualitative Inquiry* 12(2): 219–45.

Frederiksen, Morten. 2015. "Mixed Methods-Forskning." In *Kvalitative Metoder: En Grundbog*, eds. Svend Brinkmann and Lene Tanggaard. København: Hans Reitzels Forlag, 197–213.

Freudendal-Pedersen, Malene. 2007. "Mellem Frihed Og Ufrihed - Strukturelle Fortællinger Om Mobilitet i Hverdagslivet." Roskilde Universitetscenter.

———. 2014. "Ethics and Responsibilities." In *The Routledge Handbook of Mobilities*, eds. Peter Adey et al. London: Routledge, 143–53.

———. 2015a. "Cyclists as Part of the City's Organism: Structural Stories on Cycling in Copenhagen." *City & Society* 27(1): 30–50.

———. 2015b. "Whose Commons Are Mobilities Spaces? The Case of Copenhagen Cyclists." *ACME: An International Journal for Critical Geographies* 14(2): 598–621.

———. 2016a. "Det Teknologiske Fix Er Ikke et Fix!" *Deleby - et samskabt magasin om byens deleøkonomi*.

———. 2016b. *Mobility in Daily Life: Between Freedom and Unfreedom*. Abingdon, Oxon: Routledge.

Freudendal-Pedersen, Malene, Kevin Hannam, and Sven Kesselring. 2016. "Applied Mobilities, Transitions and Opportunities." *Applied Mobilities* 1(1): 1–9.

Freudendal-Pedersen, Malene, Katrine Hartmann-Petersen, Aslak A. Kjærulff, and Lise Drewes Nielsen. 2017. "Interactive Environmental Planning: Creating Utopias and Storylines within a Mobilities Planning Project." *Journal of Environmental Planning and Management* 60(6): 941–58.

Freudendal-Pedersen, Malene, and Sven Kesselring. 2016. "Mobilities, Futures & the City: Repositioning Discourses – Changing Perspectives – Rethinking Policies." *Mobilities* 11(4): 575–86.

———. 2018. "Networked Urban Mobilities." In *Exploring Networked Urban Mobilities -*

Theories, Concepts, Ideas, eds. Malene Freudendal-Pedersen and Sven Kesselring. New York: Routledge, 1–18.

———. 2020. "What Is the Urban without Physical Mobilities? COVID-19-Induced Immobility in the Mobile Risk Society." *Mobilities* 16(1): 81–95.

Fridays for Future. 2021. "Who We Are." https://fridaysforfuture.org/what-we-do/who-we-are/ (March 4, 2021).

Fridays For Future Denmark. 2021. "Klimastrejke." https://www.klimastrejke.dk/ (March 4, 2021).

Friedmann, John. 2011. "Introduction." In *Insurgencies: Essays in Planning Theory*, ed. John Friedmann. Abingdon, Oxon: Routledge, 1–14.

Gaardmand, Arne. 1993. *Dansk Byplanlægning 1938-1992*. København: Arkitektens Forlag.

Geertz, Clifford. 1973. "Thick Description: Toward and Interpretive Theory of Culture." In *The Interpretation of Cultures: Selected Essays*, New York: Basic Books, Inc., Publishers, 3–30.

Georgakopoulou, Alexandra. 2006. "Thinking Big with Small Stories in Narrative and Identity Analysis." *Narrative Inquiry* 16(1): 122–30.

———. 2007. *Small Stories, Interaction, and Identities*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

———. 2015. "Small Stories Research." In *The Handbook of Narrative Analysis*, eds. Anna De Fina and Alexandra Georgakopoulou. Chichester: WILEY Blackwell.

Gibson, Katherine, Deborah Bird Rose, and Ruth Fincher. 2015. *Manifesto for Living in the Anthropocene*. eds. Katherine Gibson, Deborah Bird Rose, and Ruth Fincher. Brooklyn, New York: punctum books.

Giddens, Anthony. 1984. *The Constitution of Society: Outline of the Theory of Structuration*. Cambridge: Polity Press.

———. 1997. *The Consequences of Modernity*. Cambridge: Polity Press.

———. 2001. *Sociology*. 4th. ed. eds. Anthony Giddens and Karen Birdsall. Cambridge: Polity Press.

———. 2011. *Politics of Climate Change*. 2. ed. Cambridge: Polity.

Glass, Ruth. 2010. "Introduction: Aspects of Change." In *The Gentrification Debates: A Reader*, ed. Japonica Brown-Saracino. New York, NY: Routledge, 18–30.

Glesne, Corrine. 2006. "Improvising a Song Og the World: Language and Representation." In *Becoming Qualitative Researchers: An Introduction*, Pearson Education, Inc.

Goldman Sachs Global Investment Research. 2015. "Millennials - Coming of Age." *Goldman Sachs Global Investment Research*. http://www.goldmansachs.com/our-thinking/pages/millennials/.

Goopy, Suzanne, and David Lloyd. 2006. "Documenting the Human Condition in Everyday Culture: Finding a Partnership between Ethnography and Photo-Documentary." *International Journal of the Humanities*: 33–38.

Graham, Stephen, and Simon Marvin. 2001. *Splintering Urbanism*. London: Routledge.

Gram-Hanssen, Kirsten. 2007. "Teenage Consumption of Cleanliness: How to Make It Sustainable?" *Sustainability: Science, Practice and Policy* 3(2): 15–23.

Gubrium, Jaber, and James Holstein. 2009. *Analyzing Narrative Reality*. 2455 Teller Road, Thousand Oaks California 91320 United States: SAGE Publications, Inc.
Gundelach, Peter, and Bettina Hauge. 2012. "For Klimaets Skyld?" *Dansk Sociologi* 23(1): 51–72.
Gundelach, Peter, Bettina Hauge, and Esther Nørregård-Nielsen. 2012. *Klimaets Sociale Tilstand*. Aarhus: Aarhus Universitetsforlag.
Halkier, Bente. 1999. *Miljø Til Daglig Brug? Forbrugeres Erfaringer Med Miljøhensyn i Hverdagen*. 1st. Frederiksberg: Forlaget Sociologi.
———. 2016. *Consumption Challenged: Food in Medialised Everyday Lives*. Paperback. Abingdon, Oxfordshire: Routledge.
———. 2018. *Fokusgrupper*. 3rd. ed. Samfundslitteratur.
Hanisch, Carol. 1970. "The Personal Is Political." In *Notes From The Second Year: Women's Liberation*, eds. Shulamith Firestone and Anne Koedt. New York, NY: Published by Editors, 76–78.
———. 2006. "The Personal Is Political: The Women's Liberation Movement Classic with a New Explanatory Introduction." http://www.carolhanisch.org/CHwritings/PIP.html.
Hannigan, John. 2006. *Environmental Sociology*. 2nd. ed. Abingdon, Oxon: Routledge.
Hansen, Allan Dreyer, and Karina Sehested. 2003. "Indledning: Konstruktivismer - Hvorfor Og Hvordan?" In *Konstruktive Bidrag - Om Teori Og Metode i Konstruktivistisk Videnskab*, eds. Allan Dreyer Hansen and Karina Sehested. Frederiksberg: Roskilde Universitetsforlag/Samfundslitteratur.
Hansen, Anette Høite. 2020. "'It Has to Be Reasonable': Pragmatic Ways of Living Sustainably in Danish Eco-Communities." In *The Role of Non-State Actors in the Green Transition: Building a Sustainable Future*, eds. Jens Hoff, Quentin Gausset, and Simon Lex. Abingdon, Oxon: Routledge, 34–51.
Haraway, Donna. 1988. "Situated Knowledges : The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14(3): 575–99.
Haraway, Donna J. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham: Duke University Press.
Harley, Trevor A. 2003. "Nice Weather for the Time of Year: The British Obsession with the Weather." In *Weather, Climate, Culture*, eds. Sarah Strauss and Ben Orlove. Oxford: Berg, 103–18.
Harper, Douglas. 2002. "Talking about Pictures: A Case for Photo Elicitation." *Visual Studies* 17(1): 13–26.
———. 2012. *Visual Sociology*. Abingdon, Oxon: Routledge.
Hartmann-Petersen, Katrine. 2009. "I Medgang Og Modgang - Fleksibilitet Og Flygtighed i Buschaufførers Mobile Liv." Roskilde Universitet.
———. 2015. "Netværkssamfundets Byplanlægning - Udvikling Af Kundskab Gennem Relationer." *PLAN* 4: 18–21.
Harvey, David. 1989. "From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism." *Geografiska Annaler. Series B, Human Geography* 71(1): 3–17.
Hastrup, Kirsten. 2011. "Klimaforandringer - Perspektiv Og Skala i Studiet Af Det Høje Nord." *Tidsskriftet Antropologi* 64: 5–21.

Hastrup, Kirsten, and Cecilie Rubow. 2014. "Introduction." In *Living with Environmental Change: Waterworlds*, eds. Kirsten Hastrup and Cecilie Rubow. Abingdon, Oxon: Routledge.

Healey, Patsy. 2010. *Making Better Places: The Planning Project in the Twenty-First Century*. Basingstoke: Palgrave Macmillan.

———. 2011. "Foreword." In *Insurgencies: Essays in Planning Theory*, ed. John Friedmann. Abingdon, Oxon: Routledge.

Heisley, Deborah D., and Sidney J. Levy. 1991. "Autodriving: A Photoelicitation Technique." *Journal of Consumer Research* 18(3): 257–72.

Hesse-Biber, Sharlene. 2012. "Feminist Approaches to Triangulation: Uncovering Subjugated Knowledge and Fostering Social Change in Mixed Methods Research." *Journal of Mixed Methods Research* 6(2): 137–46.

Hoff, Jens, and Bjarne W. Strobel. 2013. "A Municipal 'Climate Revolution'? The Shaping of Municipal Climate Change Policies." *The Journal of Transdisciplinary Environmental Studies* 12(1).

Hulme, Mike. 2008. "Geographical Work at the Boundaries of Climate Change." *Transactions of the Institute of British Geographers* 33(1): 5–11.

———. 2009. *Why We Disagree About Climate Change - Understanding Controversy, Inaction and Opportunity*. Cambridge: Cambridge University Press.

Illeris, Knud et al. 2009. *Ungdomsliv : Mellem Individualisering Og Standardisering*. 1. udgave. Frederiksberg: Samfundslitteratur.

Ingold, Tim, and Terhi Kurttila. 2000. "Perceiving the Environment in Finnish Lapland." *Body & Society* 6(3–4): 183–96.

IPCC. 2014a. "Annex II: Glossary [Mach, K.J., S. Planton and C. von Stechow (Eds.)]." In *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, eds. Core Writing Team, R.K. Pachauri, and L.A. Meyer. Geneva, Switzerland: IPCC, 117–30.

———. 2014b. *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. eds. Christopher B. Field et al. Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.

———. 2014c. *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. eds. Ottmar Edenhofer et al. Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.

———. 2014d. *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. eds. Core Writing Team, R. K. Pachauri, and L. A. Meyer. Geneva, Switzerland.

Irwin, Alan. 2001. *Sociology and the Environment: A Critical Introduction to Society, Nature and Knowledge*. Oxford: Polity Press.

Jacobsen, Michael Hviid. 2009. "The Everyday: An Introduction to an Introduction." In

Encountering the Everyday - An Introduction to the Sociologies of the Unnoticed, ed. Michael Hviid Jacobsen. Basingstoke: Palgrave Macmillan, 1–41.

Jensen, Ole B. 2013. Staging Mobilities *Staging Mobilities*. New York: Routledge.

Jensen, Ole B., and Malene Freudendal-Pedersen. 2012. "Utopias of Mobilities." In *Utopia: Social Theory and the Future*, eds. Michael Hviid Jacobsen and Keith Tester. Farnham: Ashgate Publishing Limited, 197–218.

Jones, Stephen. 2018. Cities Responding to Climate Change *Cities Responding to Climate Change: Copenhagen, Stockholm and Tokyo*. Cham: Palgrave Macmillan.

Jørgensen, Marianne, and Louise J. Phillips. 2002. *Discourse Analysis as Theory and Method*. London: SAGE Publications Ltd.

Kesselring, Sven. 2008. "The Mobile Risk Society." In *Tracing Mobilities: Towards a Cosmopolitan Perspective*, eds. Weert Canzler, Vincent Kaufmann, and Sven Kesselring. Aldershot: Ashgate.

Kildegaard, Kasper. 2020. "'Bekymret' Finansminister Advarer Nu Mod »utrolig Dyr« vej Mod Klimamål: 'Vi Skal Tænke Os Om.'" *Berlingske*. https://www.berlingske.dk/politik/bekymret-finansminister-advarer-nu-mod-utroligt-dyr-vej-mod-klimamaal-vi.

Kjeldahl, Esther Michelsen, and Vincent F. Hendricks. 2018. "The Sense of Social Influence: Pluralistic Ignorance in Climate Change." *EMBO reports* 19(e47185): 1–5.

Koelsch, Lori E. 2012. "The Virtual Patchwork Quilt: A Qualitative Feminist Research Method." *Qualitative Inquiry* 18(10): 823–29.

Kolbert, Elizabeth. 2015. *Field Notes from a Catastrophe*. New York, New York: Bloomsbury.

Kristiansen, Søren. 2015. "Kvalitative Analyseredskaber." In *Kvalitative Metoder: En Grundbog*, eds. Svend Brinkmann and Lene Tanggaard. Copenhagen: Hans Reitzels Forlag.

Krogh, Marianne. 2020. "Con-Nect-Ed-Ness: An Introduction." In *Connectedness: An Incomplete Encyclopedia of the Anthropocene*, ed. Marianne Krogh. Copenhagen: Strandberg Publishing, 12–27.

Kusenbach, Margarethe. 2003. "Street Phenomenology: The Go-Along as Ethnographic Research Tool." *Ethnography* 4(3): 455–85.

Kvale, Steinar. 1996. *InterViews: An Introduction to Qualitative Research Interviewing*. Thousand Oaks: SAGE Publications, Inc.

Kvale, Steinar, and Svend Brinkmann. 2009. *InterView - Introduktion Til et Håndværk*. 2. udgave. København: Hans Reitzels Forlag.

Larsen, Jonas. 2004. "Performing Tourist Photography." Roskilde University.

———. 2008. "Practices and Flows of Digital Photography: An Ethnographic Framework." *Mobilities* 3(1): 141–60.

Larsen, Jonas, and Mette Sandbye. 2013. "Introduction: The New Face of Snapshot Photography." In *Digital Snaps: The New Face of Photography*, eds. Jonas Larsen and Mette Sandbye. London: I.B. Tauris.

Latour, Bruno. 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.

Launsø, Laila, Olaf Rieper, and Leif Olsen. 2017. *Forskning Om Og Med Mennesker -*

Forskningstyper Og Forskningsmetoder i Samfundsforskning. 7th. ed. København: Munksgaard.

Lee, Jo, and Tim Ingold. 2006. "Fieldwork on Foot: Perceiving, Routing, Socializing." In *Locating the Field : Space, Place and Context in Anthropology*, eds. Peter Collins and Simon Coleman. Oxford: Berg, 67–86.

Lever-Tracy, Constance. 2008. "Global Warming and Sociology." *Current Sociology* 56(3): 445–66.

Levin, Kelly, Benjamin Cashore, Steven Bernstein, and Graeme Auld. 2012. "Overcoming the Tragedy of Super Wicked Problems: Constraining Our Future Selves to Ameliorate Global Climate Change." *Policy Sciences* 45(2): 123–52.

Lincoln, Yvonna S., Susan A. Lynham, and Egon G. Guba. 2018. "Paradigmatic Controversies, Contradictions, and Emerging Confluences, Revisited." In *The Sage Handbook of Qualitative Research*, eds. Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks, California: SAGE Publications, Inc., 108–50.

Long, Joshua, and Jennifer L. Rice. 2019. "From Sustainable Urbanism to Climate Urbanism." *Urban Studies* 56(5): 992–1008.

Lynggaard, Kennet. 2015. "Dokumentanalyse." In *Kvalitative Metoder: En Grundbog*, eds. Svend Brinkmann and Lene Tanggaard. København: Hans Reitzels Forlag, 153–67.

MacGregor, Sherilyn. 2009. "A Stranger Silence Still: The Need for Feminist Social Research on Climate Change." *Sociological Review* 57(2): 124–40.

Madzak, Marie Vestergaard. 2020. "Weaving Through Weather on a Danish Caravan Site." *Space and Culture* 23(2): 195–209.

Mannheim, Karl. 1964. "The Problem of Generations." In *Essays on the Sociology of Knowledge*, ed. Paul Kecskemeti. London: Routledge & Kegan Paul Ltd, 276–320.

McIntyre, Alice. 2003. "Through the Eyes of Women: Photovoice and Participatory Research as Tools for Reimagining Place." *Gender, Place and Culture: A Journal of Feminist Geography* 10(1): 47–66.

Meadows, Donella H., Dennis L. Meadows, Jørgen Randers, and William W. Behrens III. 1972. *The Limits to Growth : A Report for the Club of Rome's Project on the Predicament of Mankind*. New York, New York: Universe Books, New York.

Meilvang, Marie Leth. 2019. "The Professional Work of Hinge Objects: Inter-Professional Coordination in Urban Drainage." *Professions and Professionalism* 9(1).

———. 2021. "From Rain as Risk to Rain as Resource: Professional and Organizational Changes in Urban Rainwater Management." *Current Sociology*: 1–17.

Meilvang, Marie Leth, and Anders Blok. 2019. "Den Klimavenlige by ? I Krydsfeltet Mellem Professionelle Indsatser, Borgerønsker Og Politiske Rammer." *Samfundsøkonomen* 4: 78–87.

Mezzofiore, Gianluca. 2019. "A 25-Year-Old Politician Got Heckled during a Climate Crisis Speech. Her Deadpan Retort: 'OK, Boomer.'" *CNN*. https://edition.cnn.com/2019/11/06/asia/new-zealand-ok-boomer-trnd/index.html.

Mills, Charles Wright. 2000. *The Sociological Imagination*. 40. ed. New York, New York:

Oxford University Press.
Miro. 2020. "Miro." https://miro.com/ (September 22, 2021).
Mølbak, Mette. 2021. "En Bøf Om Ugen Og Avocado Hver Dag - Her Er Din Store Guide Til at Spise Klimavenligt." *Politiken*. https://politiken.dk/mad/art8146440/En-bøf-om-ugen-og-avocado-hver-dag-her-er-din-store-guide-til-at-spise-klimavenligt.
Morgan, David L. 1995. "Why Things (Sometimes) Go Wrong in Focus Groups." *Qualitative Health Research* 5(4): 516–23.
———. 1997. *Focus Groups as Qualitative Research*. 2nd ed. Thousand Oaks, California: SAGE Publications, Inc.
Morgan, David L., and Richard A. Krueger. 1993. "When to Use Focus Groups and Why." In *Succesful Focus Groups: Advancing the State of the Art*, ed. David L. Morgan. Thousand Oaks: SAGE Publications, Inc., 3–19.
Moriggi, Angela, Katriina Soini, Alex Franklin, and Dirk Roep. 2020. "A Care-Based Approach to Transformative Change: Ethically-Informed Practices, Relational Response-Ability & Emotional Awareness." *Ethics, Policy & Environment* 00(00): 1–18.
Murray, Lesley. 2016. "Introduction: Conceptualising Intergenerational Mobilities." In *Intergenerational Mobilities: Relationality, Age and Lifecourse*, eds. Lesley Murray and Susan Robertson. London: Routledge, 1–7.
Murray, Lesley, and Helmi Järviluoma. 2020. "Walking as Transgenerational Methodology." *Qualitative Research* 20(2): 229–38.
Murray, Lesley, Kim Sawchuk, and Paola Jirón. 2016. "Comparative Mobilities in an Unequal World: Researching Intersections of Gender and Generation." *Mobilities* 11(4): 542–52.
Narud, Asger. 2019. "Jo, Lille Danmarks Klimaindsats Nytter Noget. Faktisk Kan Den Gøre En Verden Til Forskel." *Zetland*. https://www.zetland.dk/historie/seQEY97w-ae7Eaawj-6cecd.
Neergaard, Helle. 2007. *Udvælgelse Af Cases i Kvalitative Undersøgelser*. 2nd. Frederiksberg: Forlaget Samfundslitteratur.
Neimanis, Astrida, and Rachel Loewen Walker. 2014. ""Weathering ": Climate Change and the "Thick Time " of Transcorporeality." *Hypatia* 29(3): 558–75.
Nielsen, Anne Bach, and Sofie Agnete Bislev. 2018. "Et Syn for Sagen: En Analyse Af Videnskab, Materialitet Og Erfarings Betydning for Københavns Klimatilpasningspolitik." *Politik* 21(1): 59–78.
Nielsen, Jens Christian. 2019. "Ungdom." In *Sociologiens Problemer: En Grundbog*, eds. Anders Blok and Carsten Bagge Laustsen. København: Hans Reitzels Forlag, 141–61.
Nilsen, Ann. 1997. "Introduksjon: Miljøsosiologiske Tema Og Perspektiver." In *Miljøsosiologi - Samfunn, Miljø Og Natur*, ed. Ann Nilsen. Oslo: Pax Forlag A/S, 9–25.
———. 1999. "Where Is the Future? Time and Space as Categories in Analyses of Young People's Images of the Future." *Innovation* 12(2): 175–94.
Nilsen, Ann, and Julia Brannen. 2013. "Contextualizing Lives: The History-Biography Dynamic Revisited." In *C. Wright Mills and the Sociologcial Imagination -Contemporary Persepctives*, eds. John Scott and Ann Nilsen. Cheltenham: Edward Elgar Publishing,

88–104.
Nørbech, Tom. 1997. "Et Nytt Sosiologisk Paradigme?" In *Miljøsosiologi - Samfunn, Miljø Og Natur*, ed. Ann Nilsen. Oslo: Pax Forlag A/S.
Norgaard, Kari Marie. 2011. *Living in Denial: Climate Change, Emotions, and Everyday Life*. Cambridge, Massachusetts: The MIT Press.
———. 2012. "Climate Denial and the Construction of Innocence: Reproducing Transnational Environmental Privilege in the Face of Climate Change." *Race, Gender & Class* 1(2): 80–103.
———. 2016. "Climate Change Is a Social Issue." *Chronicle of Higher Education* 62(19): 14.
———. 2018. "The Sociological Imagination in a Time of Climate Change." *Global and Planetary Change* 163(April): 171–76.
Nørrebro Lokaludvalg. 2017. *Bydelsplan for Nørrebro*. København.
Ojala, Maria. 2016. "Young People and Global Climate Change: Emotions, Coping, and Engagement in Everyday Life." In *Geographies of Global Issues: Change and Threat*, eds. Nicola Ansell, Natascha Klocker, and Tracey Skelton. Singapore: Springer Reference, 329–46.
Oldrup, Helene Hjorth, and Trine Agervig Carstensen. 2012. "Producing Geographical Knowledge through Visual Methods." *Geografiska Annaler, Series B: Human Geography* 94(3): 223–37.
Olsen, Henning. 2003. "Veje Til Kvalitativ Kvalitet." *Nordisk Pædagogik* 23: 1-20 (20 sider).
Områdefornyelsen Nørrebro. 2014. *Områdefornyelsen Nørrebroo - Kvarterplan 2014 - 2019*. København.
Opotow, Susan, and Leah Weiss. 2000. "Denial and the Process of Moral Exclusion in Environmental Conflict." *Journal of Social Issues* 56(3): 475–90.
Oreskes, Naomi. 2004. "Beyond the Ivory Tower: The Scientific Consensus on Climate Change." *Science* 306(1686).
Peek, Lori, and Alice Fothergill. 2009. "Using Focus Groups: Lessons from Studying Daycare Centers, 9/11, and Hurricane Katrina." *Qualitative Research* 9(1): 31–59.
Phoenix, Ann. 2013. "Analysing Narrative Contexts." In *Doing Narrative Research*, eds. Molly Andrews, Corinne Squire, and Maria Tamboukou. London: SAGE, 72–87.
Pink, Sarah. 2012. *Situating Everyday Life: Practices and Places*. London: SAGE.
———. 2013. *Doing Visual Ethnography*. 3rd. ed. London: SAGE.
———. 2015. *Doing Sensory Ethnography*. 2nd. ed. London: SAGE.
Plummer, Ken. 2001. Documents of life 2 *Documents of Life 2*. 2nd ed. London: SAGE Publications Ltd.
Post, Arne. 2018. *Byplanhåndbogen*. 2. udgave. Dansk Byplanlaboratorium.
Rambøll. 2019. *Hvor Klimaparate Er Københavnerne? Resultater Fra Undersøgelse Baseret På 1.000 Borgersvar i Københavns Kommune*. København. https://dk.ramboll.com/-/media/1af74809fb5b46b6b26bc80617ee4619.pdf.
Rasmussen, Erik A. 2010. *Vejret Gennem 5000 År : Meteorologiens Historie*. Aarhus: Aarhus Universitetsforlag.

Rice, Jennifer L., Daniel Aldana Cohen, Joshua Long, and Jason R. Jurjevich. 2020. "Contradictions of the Climate-Friendly City: New Perspectives on Eco-Gentrification and Housing Justice." *International Journal of Urban and Regional Research* 44(1): 145–65.

Richardson, Laurel. 1994. "Writing: A Method of Inquiry." In *Handbook of Qualitative Research*, eds. Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks, California: SAGE Publications, Inc., 516–29.

Richardson, Laurel, and Elizabeth Adams St. Pierre. 2018. "Writing: A Method of Inquiry." In *The Sage Handbook of Qualitative Research*, eds. Norman K. Denzin and Yvonna S. Lincolns. Thousand Oaks, California: SAGE, 818–38.

Riessman, Catherine Kohler. 1993. *Narrative Analysis. Qualitative Research Methods*. Newbury Park, California: SAGE Publications, Inc.

———. 2008. *Narrative Methods for the Human Sciences*. Thousand Oaks, California: SAGE Publications, Inc.

Rittel, Horst W.J., and Melvin M. Webber. 1973. "Dilemmas in a General Theory of Planning." *Policy Sciences* 4(2): 155–69.

Ronnenberg, Morten Møller, Kathrine Stefansen, and Nina Moesby Bennetsen. 2018. "Klimatilpasning Med Kælkebakker Og Fuglehuse: Lad Borgerne Bestemme." *BYPLAN NYT* 2: 22–23.

Rosa, Eugene A., and Thomas Dietz. 1998. "Climate Change and Society: Speculation, Construction and Scientific Investigation." *International Sociology* 13(4): 421–55.

Rose, Gillian. 1997. "Situating Knowledges: Positionality, Reflexivities and Other Tactics." *Progress in Human Geography* 21(3): 305–20.

———. 2008. "Using Photographs as Illustrations in Human Geography." *Journal of Geography in Higher Education* 32(1): 151–60.

———. 2016. *Visual Methodologies - An Introduction to Researching with Visual Materials*. Forth Edit. SAGE.

Rouse, Stella M., and Ashley D. Ross. 2018. *The Politics of Millennials: Political Beliefs and Policy Prefences of America's Most Diverser Generation*. Ann Arbor: University of Michigan Press.

Sandercock, Leonie. 2003. "Out of the Closet: The Importance of Stories and Storytelling in Planning Practice." *Planning Theory & Practice* 4(1): 11–28.

Saukko, Paula. 2003. *Doing Research in Cultural Studies: An Introduction to Classical and New Methodological Approaches*. London: SAGE Publications Ltd.

Saukko, Paula. 2000. "Between Voice and Discourse: Quilting Interviews on Anorexia." *Qualitative Inquiry* 6(3): 299–317.

Schatzki, Theodore R. 2002. *The Site of the Social: A Philosophical Account of the Constitution of Social Life and Change*. University Park, Pennsylvania: Pennsylvania State University Press.

Schutz, Alfred. 1971. *Collected Papers I: The Problem of Social Reality*. 3rd. ed. The Hague: Martinus Nijhoff.

Schwandt, Thomas A. 1994. "Constructivist, Interpretivist Approaches to Human Inquiry." In *Handbook of Qualitative Research*, eds. Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks, California: SAGE Publications, Inc., 118–37.

Sehested, Karina. 2009. "Urban Planners as Network Managers and Metagovernors."

Planning Theory and Practice 10(2): 245–63.
Shaviro, Steven. 2014. *The Universe of Things: On Speculative Realism*. Minneapolis: University of Minnesota Press.
Sheller, Mimi. 2014. "Sociology After the Mobilities Turn." In *The Routledge Handbook of Mobilities*, eds. Peter Adey et al. Abingdon, Oxon, 45–54.
———. 2020. "Mobility Justice." In *Handbook of Research Methods and Applications for Mobilities*, eds. Monika Büscher, Malene Freudendal-Pedersen, Sven Kesselring, and Nikolaj Grauslund Kristensen. Cheltenham: Edward Elgar Publishing, 11–20.
Sheller, Mimi, and John Urry. 2006. "The New Mobilities Paradigm." *Environment and Planning A: Economy and Space* 38(2): 207–26.
———. 2016. "Mobilizing the New Mobilities Paradigm." *Applied Mobilities* 1(1): 10–25.
Shove, Elizabeth, Mika Pantzar, and Matt Watson. 2012. *The Dynamics of Social Practice : Everyday Life and How It Changes*. London: SAGE Publications Ltd.
Spirn, Anne Whiston. 1984. *The Granite Garden - Urban Nature and Human Design*. Basic Books.
Stanes, Elyse, and Natascha Klocker. 2016. "Young People in the Global North: Environmental Heroes or Pleasure-Seeking Consumers." In *Geographies of Global Issues: Change and Threat*, eds. Nicola Ansell, Natascha Klocker, and Tracey Skelton. Singapore: Spinger, 553–74.
Statistics Denmark. 2021. "Life Expectancy." https://www.dst.dk/en/Statistik/emner/befolkning-og-valg/doedsfald-og-middellevetid/middellevetid (March 11, 2021).
Stehlik, Daniela. 2004. "From 'Snowball' to 'Rhizome': A Rethinking of Method." *Rural Society* 14(1): 36–45.
Stein, Emilie. 2021. "Vi Vil Ikke Bare Stjæle Jeres Røde Bøffer, vi Vil Ændre Verden." *Politiken*. https://politiken.dk/klima/art8140078/»Vi-vil-ikke-bare-stjæle-jeres-røde-bøffer-vi-vil-ændre-verden«.
Stensgaard, Pernille. 2013. *Københavnerne*. København: Gyldendal.
Stoknes, Per Espen. 2015. *What We Think about When We Try Not to Think about Global Warming : Toward a New Psychology of Climate Action*. White River Junction, Vermont: Chelsea Green Publishing.
Strauss, Sarah, and Ben Orlove. 2003a. "Up in the Air: The Anthropology of Weather and Climate." In *Weather, Climate, Culture*, eds. Sarah Strauss and Ben Orlove. Oxford: Berg, 3–14.
———. 2003b. *Weather, Climate, Culture*. eds. Sarah. Strauss and Ben (Benjamin S.). Orlove. Oxford: Berg.
Tanggaard, Lene, and Svend Brinkmann. 2015. "Kvalitet i Kvalitative Studier." In *Kvalitative Metoder: En Grundbogn Grundbog*, eds. Svend Brinkmann and Lene Tanggaard. København: Hans Reitzels Forlag, 521–31.
The Danish Government. 2012. *Sådan Håndterer vi Skybrud Og Regnvand: Handlingsplan for Klimasikring Af Danmark*. Copenhagen. https://www.klimatilpasning.dk/media/566642/klimahandlingsplan.pdf.

The Danish Ministry of Health. 2020. "Nye Tiltag Til Udbrudshåndtering Målrettet Natteliv Og Restaurationsbranchen i Hovedstadsområdet." https://sum.dk/nyheder/2020/september/nye-tiltag-til-udbrudshaandtering-maalrettet-natteliv-og-restaurationsbranchen-i-hovedstadsomraadet.

The Green Student Movement. 2021. "Den Grønne Studenterbevægelse." https://www.dgsb.dk/ (March 4, 2021).

The Prime Minister's Office. 2020. "Pressemøde 18. September 2020 Om COVID-19." https://www.stm.dk/presse/pressemoedearkiv/pressemoede-18-september-2020-om-covid-19/.

Theilgaard, Jesper. 2010. *Det Danske Vejr*. 2. ed. København: Gyldendal.

Thomsen, Trine Lund, Inger Glavind Bo, and Ann-Dorte Christensen. 2016. "Narrativ Forskning: Tilgange Og Metoder." In *Narrativ Forskning: Tilgange Og Metoder*, eds. Inger Glavind Bo, Ann-Dorte Christensen, and Trine Lund Thomsen. København: Hans Reitzels Forlag, 13–34.

Tinkler, Penny. 2014. *Using Photographs in Social and Historical Research*. London: SAGE.

Tronto, Joan. 2017. "There Is an Alternative: Homines Curans and the Limits of Neoliberalism." *International Journal of Care and Caring* 1(1): 27–43.

Tukker, Arnold et al. 2014. 2 Carbon, water, land and materials embodied in trade and final consumption calculated with EXIOBASE *The Global Resource Footprint of Nations: Carbon, Water, Land and Materials Embodied in Trade and Final Consumption with EXIOBASE 2.1*. Leiden/Delft/Vienna/Trondheim.

Ungar, Sheldon. 1992. "The Rise and (Relative) Decline of Global Warming As a Social Problem." *The Sociological Quarterly* 33(4): 483–501.

United Nations. 1992. United Nations Frameork Convention on Climate Change *United Nations Framework Convention on Climate Change*. Rio de Janeiro. https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf.

———. 1997. *Kyoto Protocol to the United Nations Framework Convention on Climate Change*. Kyoto. https://unfccc.int/sites/default/files/resource/docs/cop3/l07a01.pdf.

———. 2015. *Paris Agreement*. Paris. https://unfccc.int/sites/default/files/english_paris_agreement.pdf.

Urry, John. 2000. *Sociology beyond Societies - Mobilities for the Twenty-First Century*. London: Routledge.

———. 2011. *Climate Change & Society*. Cambridge: Polity Press.

Vannini, Phillip, and Bradley Austin. 2020. "Weather and Place." In *The Routledge Handbook of Place*, eds. Tim Edensor, Ares Kalandides, and Uma Kothari. Abingdon, Oxon: Routledge, 135–44.

Vannini, Phillip, and Jonathan Taggart. 2015. 10 Energy Research & Social Science *Off the Grid: Re-Assembling Domestic Life*. New York, New York: Routledge.

Vannini, Phillip, Dennis Waskul, Simon Gottschalk, and Toby Ellis-Newstead. 2012. "Making Sense of the Weather: Dwelling and Weathering on Canada's Rain Coast." *Space and Culture* 15(4): 361–80.

Wahlström, Mattias et al. 2019. Keele University *Protest for a Future: Composition, Mobilization and Motives of the Participants in Fridays For Future Climate Protests on 15 March, 2019 in 13 European Cities*.

Wang, Caroline C. 1999. "Photovoice: A Participatory Action Research Strategy Applied to Women's Health." *Journal of Women's Health* 8(2): 185–92.
Warren, Carol A. B., and Jennifer Kay Hackney. 2000. *Gender Issues in Ethnography*. 2nd. ed. Thousand Oaks, California: SAGE Publications, Inc.
Wegener, Charlotte. 2014. "'Would You like a Cup of Coffee?' Using the Researcher's Insider and Outsider Positions as a Sensitising Concept." *Ethnography and Education* 9(2): 153–66.
World Commission on Environment and Development. 1987. *Our Common Future*.
Zahavi, Dan. 2003. *Fænomenologi*. 1st. ed. Frederiksberg: Roskilde Universitetsforlag.
Zeitler, Ullrich. 2008. "The Ontology of Mobility, Morality and Transport Planning." In *The Ethics of Mobilities: Rethinking Place, Exclusion, Freedom and Environment*, eds. Sigurd Bergmann and Tore Sager. Aldershot, Hampshire: Ashgate, 233–39.
Zimm, Malin. 2018. "Vatnnets Form." *PLAN* 73(2–3): 57–64.

Appendixes

Appendix A: Recruitment flyers (in Danish)

Appendix B: Interview guide: Individual interviews

Appendix C: Moderator guide: Focus groups

Appendix D: Interview guide: Expert interview

Appendix A

Recruitment flyers (in Danish)

Roskilde Universitet

Institut for Mennesker og Teknologi (IMT)

Vil du deltage i et forskningsprojekt om **oplevelser af dit kvarter, klima og natur i byen?**

Du kan deltage, hvis du bor i Aarhusgade-kvarteret i Nordhavn (se kortet nedenfor) og er født i perioden år 1980-2000.

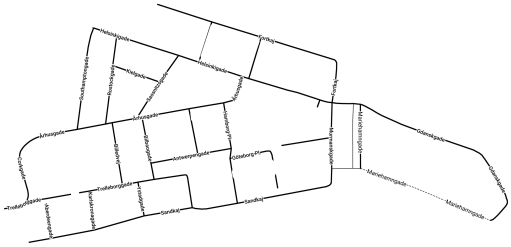
Deltagelse i projektet indebærer at du:

- Tager 4-5 billeder med din telefon af dit lokale bykvarter.
- Deltager i et interview om dine oplevelser af dit kvarter, klima og natur i byen. Interviewet slutter med en kort gåtur i kvarteret, hvis muligt.
- Eventuelt deltager i en workshop med andre deltagere fra dit kvarter i efteråret/vinteren 2019.

De praktiske detaljer om billeder, interview og workshop aftaler vi nærmere.

Har du lyst til at deltage?
Kontakt **Nina Moesby Bennetsen** på **moesby@ruc.dk** eller **46 74 37 33**.

Persondata
Inden interviewet skal du underskrive en samtykkeerklæring. Håndtering af data sker i overensstemmelse med gældende databeskyttelsesregler.



UNIVERSITETSVEJ 1, Bygning 02, POSTBOX 260, 4000 ROSKILDE
DIREKTE NUMMER: +45 46 74 37 33, E-MAIL: MOESBY@RUC.DK

Roskilde Universitet

Institut for Mennesker og Teknologi (IMT)

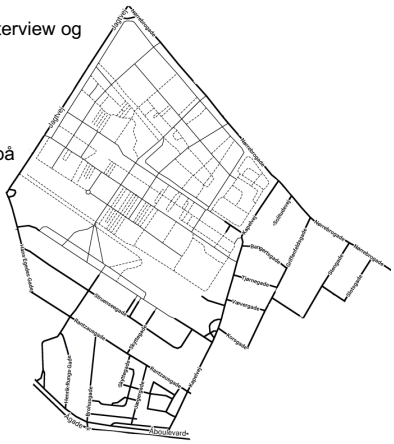
Vil du deltage i et forskningsprojekt om **oplevelser af dit kvarter, klima og natur i byen?**

Du kan deltage, hvis du bor i Rantzausgade-kvarteret på Nørrebro (se kortet nedenfor) og er født i perioden år 1980-2000.

Deltagelse i projektet indebærer at du:

- Tager 4-5 billeder med din telefon af dit lokale bykvarter.
- Deltager i et interview om dine oplevelser af dit kvarter, klima og natur i byen. Interviewet slutter med en kort gåtur i kvarteret, hvis muligt.
- Eventuelt deltager i en workshop med andre deltagere fra dit kvarter i efteråret/vinteren 2019.

De praktiske detaljer om billeder, interview og workshop aftaler vi nærmere.



Har du lyst til at deltage?
Kontakt **Nina Moesby Bennetsen** på **moesby@ruc.dk** eller **46 74 37 33**.

Persondata
Inden interviewet skal du underskrive en samtykkeerklæring. Håndtering af data sker i overensstemmelse med gældende databeskyttelsesregler.

UNIVERSITETSVEJ 1, Bygning 02, POSTBOX 260, 4000 ROSKILDE
DIREKTE NUMMER: +45 46 74 37 33, E-MAIL: MOESBY@RUC:DK

Appendix B

Interview guide: Individual interviews

Theme	Aim	Questions
Introduction	Setting the scene	Introduction to the research and the interview Do you have any questions before we start?
	The participants introduce themselces and start talking	Would you start by telling me a about yourself? - How old are you? - Where do you live? - Do you live with someone? If yes, then who? - What do you do for a living/what is your occupation?
Everyday life in the city/neigbhourhood	Hearing about the everyday life	What does an ordinary day look like to you? What would you say characterises your everyday life?
The physical surroundings: The neighbourhood	**The neighbourhood** Opinions about the neighbourhood	Why do you live where you live? What is the best about the neighbourhood? What is the best plaec? Why?

		What is the worst about the neighbourhood? What is the worst place? Why? How much time do you send in the neighbourhood in your day-to-day life? How much are you other places in the city? Are there times, where you are especially happy about living here? Are there times, where you are especially unhappy about living here?
	Movement in the city	How do you move around the neighbourhood? Around the city? How did you get here today?
	Thoughts on the future	How do you imagine this neighbourhood in ten years? Transition to talking about the photos: Let's look at you photos: When you talk about the photo, would you describe which photo you are talking about?
Bodily and sensory experiences with the neighbourhood, nature and climate change	Hearing about the task for methodological reasons	How was it to take the photos?

	Talking about the photos may evoke details about bodily and sensory experiences. Questions to help the participant talk about the photos (if needed) Choice of motive	Can you tell me about one of your photos? What is in it? Why did you take it? What do you see on the photo? Tell me more about… What makes you say that? What did you want to show with this photo? Where did you take it? Where there anything you chose not to photograph? Why? (Transition to talking about abstract concepts of nature and climate change)
Nature (sensitising or transitioning concept)	Ideas about and experiences with nature	What is nature to you? What is nature in the city to you? What does nature mean to you in your daily life? When do you think about nature? Do you seek nature? Why? Where do you go if you want to be in nature? Would you tell me about the last time you has a good experience with nature?

		Would you tell me about a bad experience with nature? (Transition to talking about climate change)
Climate change	Ideas about and experiences with climate change	What do you understanding by the term climate change? Do you think about climate change? When?
	Climate change in everyday life	What do you think about when you think about climate change? In which situations do you think about climate change? Why do you mention…? Are there places or times, where you particularly think about climate change? Why? Have you experienced climate change? When did you start to think about climate change? (Round-off and debriefing of the interview, transition to walk-along)

		Do you have any questions befor we go?
Walk-along in the neighbourhood (Clarified before the interview)	Possibility for new or elaborated thoughts Where do the participants walk to and show in their neighbourhood?	Where would you like to go? It can be a place that you've thought of during the interview or simply somewhere, you would like us to go to. You lead the way, and I'.. follow. Can you tell me where we are going and why?
Round-off		(Round-off again and ask if the participant wants to participate in the workshop)

Appendix C

Moderator guide: Focus groups

The following is the latest version of the moderator guide. I have made smaller adjustments, based on the learning points from the first focus group. I have described these learning points and changes in Chapter 2.

Time	**Theme**	**Aim**	**Spørgsmål/Øvelse**
17:00-17:10	Arrival on the platform	Allowing time for everyone to check into the platform	Check that everyone have access and that the technique works. Turn on the screen recording.
17:10-17:15	Introduction Presentation round Status of the research sine the interviews Program and format of a focus group,	Everyone says something from the beginning. We can test sound and cameras. The participants hear about the framing of the focus group	Welcome and introduction to the online format. Let's start with a presentation round. You know me, but would you introduce yourself to each other. Please say your name, age and where you live. Update on the research: What has happenened since the individual interviews Presentation of the aim of the focus group and the program for the next couple of hours. Introduction to the format and differences between interviews and focus groups. Introduction to the excercises. Ethics: Anonymity, consent to sound and video recordings

	their consent		Do you have any questions before we start? (Transition to the first excercise)
17:15-17:40	Introduction exercise: Word association task	First part: The participants have a chance to individually think about they associate with climate change, a question that I also asked in the interviews. Second part: Discussion of the different words. Follow-up questions	First, write down your name and the three words that you relate to climate change in your daily lives. When you have written them, we'll take a round to hear what you've written and why Now, I want you to discuss: Which words do you recognise or pop up? Why? What do the rest of you think about that? Is there anything missing? (Transition to the next excercise)
17:40-18:10	First thematic discussion: Experiences with climate change	The participants discuss their experiences with climate change Follow-up questions	Where do you encounter climate change in your daily lives? I have inserted photos of things, that you have mentioned in the interviews. You can use them as inspiration, but if you think of other things, we can write them in the collum on the right. Which photos symbolises times when you encounter climate change? Are there any photos you don't relate to climate change?

			Is there anything that surprises you in the discussion? (Transition to break)
18:10:-18:15	Break		
18:15-18:45	Second thematic discussion: Responses to climate change	The participants discuss various statements about climate change responses First part: Individual: The participants consider by themselves	Welcome back. The next exercise is about responses to climate change or how you react to climate change. I've written statements on each side of these lines. For instance, on the first line: "I worry about climate change" and "I don't worry about climate change". Choose a colour and place the sticky note of that colour and place it on the line, in other words one colour in each line. We'll discuss it afterwards.
		Second part: Together: The participants discuss	Let's talk about where you've placed your sticky notes. How was it to place them? Where did you place your notes? Why? Lad os tale om, hvor I har placeret Let's start with the first line.
		Follow-up questions	X, I notice that your sticky note is… Would you say something about why you've placed it there? What do the rest of you think about that? I see that no one has placed a sticky note… Why not? In which situations do you think that? Are there situations where you feel differently? When? Why?

18:45-19:00	Debrief-ing	The particpants can ask about the re-search or say what they've thought of during the focus group	Before we end this, do you have any questions or comments?
		Short evaluation	How was it to participate in this focus group today?
		Debriefing	I'll continue the work. Please write me, if you have any questions or com-ments. Thank you for your time.

Appendix D

Interview guide: Expert interview

Themes	Aims	Questions
Introduction	Setting the scene for the interview and start the conversation	Introduction to the research and the interview. Do you have any questions before we begin?
	Lykke's idea of the position content	Would you like to start telling a little about which tasks and areas of responsibilities you have as a program leader?
	Clarification of the kind of climate-change work	I am particularly interested in climate change which is a broad-ranging phenomenon. Can you say a little about how you work with climate change? What types of climate change or consequences of climate change have you particularly worked with? As far as I can read, you have worked in the City of Copenhagen for 26 years in various departments and positions. What has been your role in the City of Copenhagen with climate change?
Climate change in Copenhagen: 1990s-present	Development of the work with climate change in Copenhagen.	I would like to go back in time and talk to you about the initial work on climate change. Do you remember when you were first introduced to climate change in

		relation to your work in the City of Copenhagen? How was it introduced? Who did it? In what connection? (Climate plan, 2009, Climate adaptation plan 2011, Cloudburst plan 2012, others?)
	Lykke's perspective on development.	What characterised the City of Copenhagen's work with climate change when you started this work? What has changed in the years you have been employed by the City of Copenhagen? What have been the main initiatives? Why?
	Inspiration	Which cities or initiatives have been role models that you have looked at or measured your work from?
	Tipping points (Were there other than the "obvious" like cloudbursts 2011 and summer 2018? Specifically in relation to the participants' focus on 2018)	Were there specific episodes or times that have led to changes in how you worked with climate change? Which ones? Many participants that I have interviewed talk about the summer of 2018. How did you experience that summer as an event in relation to your work? What influence did it have?

Current thoughts about climate change and the City of Copenhagen	The most important present themes. Lykke's internal point of view.	In your opinion, what are the biggest discussions and conversations about climate change right now?
Climate change in the city: Themes inspirered by the participants' stories	Thoughts on implementing the physical measures	On one hand, climate change is an abstract phenomenon that can be difficult to relate to, and, on the other, something that is expressed physically in the city. What thoughts do you have about this duality in your work?
	Buzzwords	Liveability and resilience are some of the words that have dominated many discussions about the development of the city. Can you say something about which meaning those concepts have had in your work?
	Initiatives in existing and new neighborhoods	I have interviewed people who live in Inner Nørrebro and in Nordhavn, respectively. The two neighborhoods differ from each other, e.g. in their history as urban neighborhoods. Can you say a little about what thoughts you have about implementing climate initiatives in the older urban neighborhoods and in the newer ones? What similarities and differences do you work with? I have noticed that several of the participants in this project talk about a special community in their neighborhoods, a village in the city, regardless of whether

		they live at Nørrebro or in Nordhavn. I was somewhat surprised at first because I understand the two neighborhoods as quite distinct. What do you think about the meaning of the place? Many of the Copenhageners I have interviewed talk about what they themselves do in relation to climate change when I ask how they understand climate change. I write about it in response to climate change. It is often about specific actions they take in relation to consumption in everyday life.
	Municipal initiatives in the everyday life of Copenhageners	How do you understand the role of the municipality working with climate change in relation to the lived everyday life within the city? How far do you think the municipality can go? How has your collaboration been with departments that work with this part of the climate work? How do you feel that Copenhageners react to such initiatives?
Climate change and the City of Copenhagen in the future.	A glance at the future	What do you see as the biggest task for the City of Copenhagen in relation to climate change? Why? What challenges do you see as the biggest in relation to the City

		of Copenhagen's future work with climate change? Why?
	What have we learned?	In conclusion, I would like to ask what you think you that the City of Copenhagen has learned through your time, with a particular focus on climate change. Can you indicate the biggest successes? And the biggest mistakes or areas with room for improvement?
Round-off and debriefing		Do you have any questions or comments before we end?

Drastic changes in Earth's systems are considered the biggest contemporary challenge for human beings, cities and societies. Cities worldwide take climate action, and Copenhagen is no exception. For more than a decade, the City of Copenhagen has dealt strategically with climate change and is now internationally renowned for combining strategies for sustainability and liveability.

This thesis explores the everyday life perspective of how Copenhageners talk about climate change, through the concept small stories.

This approach emphasises the importance of the often-overlooked kinds of everyday talk about an issue. Small stories are fleeting, but detailed accounts, often concerning present, past, future and possible events related to an issue. The study of small stories contributes to greater understandings of climate challenges as they reflect challenges and dilemmas in everyday life engagements in climate change. The thesis contributes with detailed analyses of how small stories about climate change can enhance understandings of climate challenges in research and in practice.

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